APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6459° N, Long112.6303° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam.
	Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

acres.

Wetlands:

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are $\overline{30}$ (or more) river miles from TNW.

Project waters are **30 (or more)** river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	\square	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:
concentra	tions	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater pod sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	_	Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: httify specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

l.	TNWs and A	djacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	■ Wetlands a	adjacent to TNWs:	acres.	

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
1)E	CRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY): 10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
	$\overline{\boxtimes}$	

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

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	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6449° N, Long112.6306° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	h Identify (estimate) size of waters of the U.S. in the review area.

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

acres.

Non-regulated waters/wetlands (check if applicable):³

linear feet: width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

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A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

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Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are 30 (or more) river miles from TNW.

Project waters are 30 (or more) river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is:
	Tributary properties with respect to top of bank (estimate): Average width: 5 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain:
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: aracterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. https://doi.org/10.1001/j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(i	 Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentration	ons of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. C	haracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i	Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
	(b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
	Surface flow is: Pick List Characteristics:
	Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
	(c) Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
	(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(i	Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Identify specific pollutants, if known:
(1	iii) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. C	haracteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	seasonany
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
<u>SE</u>	CTIO	N IV: DATA SOURCES.
A.	and	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

A.	A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015					
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER:SPL-2007-737					
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6465° N, Long112.6307° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash					
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.					
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):					
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.					
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:					
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.					
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]					
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs					

$\mbox{\bf b.}\;\;\mbox{Identify}\;\mbox{(estimate)}\;\mbox{size}\;\mbox{of waters}\;\mbox{of}\;\mbox{the}\;\mbox{U.S.}\;\mbox{in}\;\mbox{the}\;\mbox{review}\;\mbox{area:}\;$

Impoundments of jurisdictional waters

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable):³

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Isolated (interstate or intrastate) waters, including isolated wetlands

SECTION I: BACKGROUND INFORMATION

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are $\overline{30}$ (or more) river miles from TNW.

Project waters are **30 (or more)** river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:					
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).					
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:					
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %					
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:					
	Surface flow is: Discrete. Characteristics:					
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:					
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community					
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:					
Cha	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:					

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		logical Characteristics. Channel supports (check all that apply):
			Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		\boxtimes	Habitat for:
			Federally Listed species. Explain findings:
			☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	ations	s of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
	CI.		
2.	Cha	aract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Phy	sical Characteristics:
		(a)	General Wetland Characteristics:
			Properties: Wetland size: acres
			Wetland size: acres Wetland type. Explain: .
			Wetland quality. Explain: .
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW:
		(0)	Flow is: Pick List. Explain:
			Surface flow is: Pick List
			Characteristics:
			Subsurface flow: Pick List . Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW:
			☐ Directly abutting ☐ Not directly abutting
			Discrete wetland hydrologic connection. Explain:
			☐ Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW
			Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List . Estimate approximate location of wetland as within the Pick List floodplain.
			Estimate approximate location of wettand as within the Tex List moodplain.
	(ii)		emical Characteristics:
		Cna	racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:
		Ider	ntify specific pollutants, if known:
	(***)	\ D *.1	Land Character Widow Language (Andrew Malestanda)
	(111)) B101	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
		Ħ	Vegetation type/percent cover. Explain:
			Habitat for:
			Federally Listed species. Explain findings:
			☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings:
	_		
3.	Cha		eristics of all wetlands adjacent to the tributary (if any)
			wetland(s) being considered in the cumulative analysis: Pick List proximately () acres in total are being considered in the cumulative analysis.
		, Th	nonlineary () acres in total are coming considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	ljacent Wetlands.	Check all that a	apply and provide siz	e estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
TO	OI ATEN HINTEDCTATE OD INTDA CTATE) WATERC INCLINING ICOLATER WET AND THE LIGE
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY): 10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:					
]	Identify water body and summarize rationale supporting determination:					
]	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: . Wetlands: acres.					
	MON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above): Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional udgment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.					
	Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.					
SEC	TION IV: DATA SOURCES.					
A. S	UPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS NHD data. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.					

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SEC	CTION I: BACKGROUND INFORMATION
Α.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6402° N, Long112.6318° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 ☐ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. ☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the new area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Impoundments of jurisdictional waters

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are 30 (or more) river miles from TNW.

Project waters are **30 (or more)** river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW^5 : Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 4 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	\square	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:
concentra	ations	s of fe	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: tracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tiffy specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands a	djacent to TNWs:	acres.	

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: .
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:					
	Identify water body and summarize rationale supporting determination:					
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.				
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):				
	factor judg	ride acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.				
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.				
SEC	CTIO	NIV: DATA SOURCES.				
	SUPH and	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.				

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
с.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6449° N, Long112.6323° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam.
	Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

acres.

Wetlands:

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are 30 (or more) river miles from TNW.

Project waters are **30 (or more)** river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	\boxtimes	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side.
			Wetland fringe. Characteristics: . Habitat for:
			Federally Listed species. Explain findings: .
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
concentr	ations	s of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Phy	vsical Characteristics:
	(-)		General Wetland Characteristics:
			Properties:
			Wetland size: acres
			Wetland type. Explain: Wetland gyality. Explain:
			Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW:
			Flow is: Pick List. Explain:
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW:
		(0)	Directly abutting
			Not directly abutting
			Discrete wetland hydrologic connection. Explain:
			Ecological connection. Explain:
			Separated by berm/barrier. Explain: .
		(d)	Proximity (Relationship) to TNW
			Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List.
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)		emical Characteristics: aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		Ciia	characteristics; etc.). Explain:
		Ider	ntify specific pollutants, if known:
	(iii	Riol	logical Characteristics. Wetland supports (check all that apply):
	()		Riparian buffer. Characteristics (type, average width):
			Vegetation type/percent cover. Explain: .
		Ш	Habitat for:
			Federally Listed species. Explain findings: Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings:
3.	Chs	ract	eristics of all wetlands adjacent to the tributary (if any)
٠.	~11t		wetland(s) being considered in the cumulative analysis: Pick List
		App	proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide	size estimates in review area:	
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands ac	ljacent to TNWs:	acres.			

2.	 □ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: □ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
		100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	<u>CTION I: BACKGROUND INFORMATION</u> REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6402° N, Long112.6333° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are 30 (or more) river miles from TNW.

Project waters are **30 (or more)** river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 4 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

(iv) Biological Characteristics. Channel supports (check all that apply): □ Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. □ Wetland fringe. Characteristics: □ Habitat for: □ Federally Listed species. Explain findings: □ Fish/spawn areas. Explain findings: □ Other environmentally-sensitive species. Explain findings: □ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater concentrations of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
(b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
Surface flow is: Pick List Characteristics:
Subsurface flow: Pick List . Explain findings: Dye (or other) test performed:
(c) Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(ii) Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Identify specific pollutants, if known:
(iii) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. Characteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	GRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	 which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain: 				
	Identify water body and summarize rationale supporting determination:				
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.			
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):			
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.			
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.			
<u>SE</u>	CTIO	NIV: DATA SOURCES.			
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.			

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6434° N, Long112.6337° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS
Α.	RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are 30 (or more) river miles from TNW.

Project waters are **30 (or more)** river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW^5 : Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:				
	Tributary properties with respect to top of bank (estimate): Average width: 5 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).				
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck				
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %				
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:				
	Surface flow is: Discrete. Characteristics:				
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:				
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community				
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:				
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:				

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	\square	ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:
concentra	tions	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Phy	sical Characteristics:
		(a)	General Wetland Characteristics: Properties:
			Wetland size: acres
			Wetland type. Explain: .
			Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Flow is. Tek List. Explain.
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings:
			Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW:
			Directly abutting
			☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain:
			Ecological connection. Explain:
			Separated by berm/barrier. Explain: .
		(d)	Proximity (Relationship) to TNW
			Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List .
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Che	emical Characteristics:
	(11)		racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		T 1	characteristics; etc.). Explain:
		Iden	tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply):
		H	Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain:
			Habitat for:
			Federally Listed species. Explain findings: Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings: .
3.	Cha	racte	eristics of all wetlands adjacent to the tributary (if any)
		All	wetland(s) being considered in the cumulative analysis: Pick List
		App	proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

l.	TNWs and A	djacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	■ Wetlands a	adjacent to TNWs:	acres.	

2.	 RPWs that flow directly or indirectly into TNWs. ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: .
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:				
	Identify water body and summarize rationale supporting determination:				
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.			
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):			
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.			
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.			
SE(CTIO	NIV: DATA SOURCES.			
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.			

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6453° N, Long112.6348° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are 30 (or more) river miles from TNW.

Project waters are **30 (or more)** river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:				
	Tributary properties with respect to top of bank (estimate): Average width: 5 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).				
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:				
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %				
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days are Project Area. Other information on duration and volume:				
	Surface flow is: Discrete. Characteristics:				
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:				
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. ⁷ Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community				
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics tidal gauges other (list):				
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. https://doi.org/10.1001/j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.				

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentrations of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. Characte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
	Surface flow is: Pick List Characteristics:
	Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
Cha	mical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
(iii) Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
All	eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that a	pply and provide size estimate	es in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	RPWs that flow directly or indirectly into TNWs. ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are
	jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:				
	Identify water body and summarize rationale supporting determination:				
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.			
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):			
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.			
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.			
SEC	CTIO	NIV: DATA SOURCES.			
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.			

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6573° N, Long112.6361° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and
	Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

acres.

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

Wetlands:

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1.	TN	W

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are 30 (or more) river miles from TNW.

Project waters are **30 (or more)** river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is:
	Tributary properties with respect to top of bank (estimate): Average width: 2 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. ⁷ Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics tidal gauges other (list):
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. atify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

	(iv)	Biological Characteristics. Channel supports (check all that apply):	
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:	
		Habitat for:	
		Federally Listed species. Explain findings:	
		Fish/spawn areas. Explain findings:	
		☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater	
concentra	ations	is of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.	
	~		
2.	Cha	aracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW	
	(i)	Physical Characteristics:	
		(a) General Wetland Characteristics:	
		Properties: Wetland size: acres	
		Wetland type. Explain: .	
		Wetland quality. Explain:	
		Project wetlands cross or serve as state boundaries. Explain: .	
		(b) General Flow Relationship with Non-TNW:	
		Flow is: Pick List. Explain:	
		Surface flow is: Pick List	
		Characteristics: .	
		Subsurface flow: Pick List. Explain findings: .	
		Dye (or other) test performed:	
		(c) Wetland Adjacency Determination with Non-TNW:	
		Directly abutting	
		Not directly abutting	
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:	
		Separated by berm/barrier. Explain:	
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are Pick List river miles from TNW.	
		Project waters are Pick List aerial (straight) miles from TNW.	
		Flow is from: Pick List.	
		Estimate approximate location of wetland as within the Pick List floodplain.	
	(ii)	Chemical Characteristics:	
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed	
		characteristics; etc.). Explain: Identify specific pollutants, if known:	
	(iii)	i) Biological Characteristics. Wetland supports (check all that apply):	
		Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain:	
		Habitat for:	
		Federally Listed species. Explain findings:	
		Fish/spawn areas. Explain findings:	
		☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:	
3.	Cha	aracteristics of all wetlands adjacent to the tributary (if any)	
		All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.	
		Approximately () acres in total are being considered in the cumulative alialysis.	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

TNWs and A	djacent Wetlands.	Check all that appl	y and provide size estimates in review area:
TNWs:	linear feet	width (ft), Or,	acres.
Wetlands	adjacent to TNWs:	acres.	

2.	 RPWs that flow directly or indirectly into TNWs. ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are
	jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
B.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6578° N, Long112.6362° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
SEG A.	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Impoundments of jurisdictional waters

b. Identify (estimate) size of waters of the U.S. in the review area:

linear feet:

Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

Tr

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

4	FETS TWW
Ι.	INW

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are 30 (or more) river miles from TNW.

Project waters are **30 (or more)** river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 2 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: The presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(i	v)]	Biol	ogical Characteristics. Channel supports (check all that apply):
				Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side.
				Wetland fringe. Characteristics: .
			\boxtimes	Habitat for:
				Federally Listed species. Explain findings:
				Fish/spawn areas. Explain findings:
				Other environmentally-sensitive species. Explain findings: .
				Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
conce	entratio	ons	of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2	2. C	har	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i		-	sical Characteristics:
			(a)	General Wetland Characteristics:
				Properties:
				Wetland size: acres
				Wetland type. Explain:
				Wetland quality. Explain:
				Project wetlands cross or serve as state boundaries. Explain:
			<i>a</i> >	C. JEL DIC II SIN MIN
			(b)	General Flow Relationship with Non-TNW:
				Flow is: Pick List . Explain:
				Surface flow is: Pick List
				Characteristics:
				Characteristics
				Subsurface flow: Pick List. Explain findings: .
				Dye (or other) test performed:
			(c)	Wetland Adjacency Determination with Non-TNW:
			(0)	Directly abutting
				Not directly abutting
				Discrete wetland hydrologic connection. Explain:
				Ecological connection. Explain:
				Separated by berm/barrier. Explain:
			(d)	Proximity (Relationship) to TNW
			` '	Project wetlands are Pick List river miles from TNW.
				Project waters are Pick List aerial (straight) miles from TNW.
				Flow is from: Pick List.
				Estimate approximate location of wetland as within the Pick List floodplain.
	(i	/	-	mical Characteristics:
			Chai	racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
				characteristics; etc.). Explain: .
			Iden	tify specific pollutants, if known:
	(iii)		ogical Characteristics. Wetland supports (check all that apply):
			Ц	Riparian buffer. Characteristics (type, average width):
			\sqcup	Vegetation type/percent cover. Explain: .
			Ш	Habitat for:
				Federally Listed species. Explain findings:
				Fish/spawn areas. Explain findings:
				Other environmentally-sensitive species. Explain findings:
				Aquatic/wildlife diversity. Explain findings: .
	•	1.		
•	3. C			eristics of all wetlands adjacent to the tributary (if any)
				wetland(s) being considered in the cumulative analysis: Pick List
			App	roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

l.	TNWs and A	djacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	■ Wetlands a	adjacent to TNWs:	acres.	

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:			
	Identify water body and summarize rationale supporting determination:				
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.			
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):			
	facto	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.			
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.			
SEC	<u>CTIO</u>	N IV: DATA SOURCES.			
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.			
	$\boxtimes \Box \Box \Box \Box \boxtimes$	☐ USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)			

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

<u>SЕ</u> (CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6502° N, Long112.6370° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are 30 (or more) river miles from TNW.

Project waters are **30 (or more)** river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW^5 : Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:						
	Tributary properties with respect to top of bank (estimate): Average width: 5 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).						
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:						
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %						
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:						
	Surface flow is: Discrete. Characteristics:						
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:						
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: The presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community						
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics tidal gauges other (list):						
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:						

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	Biological Characteristics. Channel supports (check all that apply):
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		Other environmentally-sensitive species. Explain findings:
concentra	ations	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2	Cho	proceedings of westlands adjacent to non TNW that flave directly as indirectly into TNW
2.	Clia	aracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Physical Characteristics:
		(a) General Wetland Characteristics: Properties:
		Wetland size: acres
		Wetland type. Explain: .
		Wetland quality. Explain: .
		Project wetlands cross or serve as state boundaries. Explain:
		(b) General Flow Relationship with Non-TNW:
		Flow is: Pick List. Explain: .
		Surface flow is: Pick List
		Characteristics: .
		Subsurface flow: Pick List. Explain findings: .
		Dye (or other) test performed:
		(c) Wetland Adjacency Determination with Non-TNW:
		☐ Directly abutting
		□ Not directly abutting
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
		Separated by berm/barrier. Explain: .
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are <u>Pick List</u> river miles from TNW.
		Project waters are Pick List aerial (straight) miles from TNW.
		Flow is from: Pick List.
		Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Chemical Characteristics:
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		characteristics; etc.). Explain: Identify specific pollutants, if known:
	(***)	
	(111)	Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
		Vegetation type/percent cover. Explain:
		Habitat for:
		Federally Listed species. Explain findings:
		☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
		☐ Aquatic/wildlife diversity. Explain findings:
_	~-	
3.	Cha	aracteristics of all wetlands adjacent to the tributary (if any)
		All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.
		- Approximately () delete in total are being considered in the cumulative untrysts.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands a	djacent to TNWs:	acres.	

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISC	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRUCTION OF WHICH COLD DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:	
	entify water body and summarize rationale supporting determination:	
	ovide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.	
F.	ON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):	he
	ovide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR stors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best profession light (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.	ıal
	ovide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where standing is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.	uch
SEC	ON IV: DATA SOURCES.	
A.	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.	ced

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SEC A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
B.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6583° N, Long112.6370° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В. (CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles Drainage area: 3 square miles Average annual rainfall: 7 inches Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

☐ Tributary flows through 5 tributaries before entering TNW.

Project waters are 30 (or more) river miles from TNW.

Project waters are **30 (or more)** river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW^5 : Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 2 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	Biological Characteristics. Channel supports (check all that apply):	
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:	
		Habitat for:	
		Federally Listed species. Explain findings:	
		Fish/spawn areas. Explain findings:	
		Other environmentally-sensitive species. Explain findings:	
concentra	ations	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater s of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.	
2	Cha	TNYV that flow dead and a discount to many things the flow discount of t	
2.	Cna	aracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW	
	(i)	Physical Characteristics:	
		(a) General Wetland Characteristics: Proportion:	
		Properties: Wetland size: acres	
		Wetland type. Explain: .	
		Wetland quality. Explain: .	
		Project wetlands cross or serve as state boundaries. Explain:	
		(b) General Flow Relationship with Non-TNW:	
		Flow is: Pick List. Explain:	
		Surface flow is: Pick List	
		Characteristics: .	
		Subsurface flow: Pick List. Explain findings: .	
		Dye (or other) test performed: .	
		(c) Wetland Adjacency Determination with Non-TNW:	
		Directly abutting	
		□ Not directly abutting	
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:	
		Separated by berm/barrier. Explain:	
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are Pick List river miles from TNW.	
		Project waters are Pick List aerial (straight) miles from TNW.	
		Flow is from: Pick List.	
		Estimate approximate location of wetland as within the Pick List floodplain.	
	(ii)	Chemical Characteristics:	
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed	
		characteristics; etc.). Explain: Identify specific pollutants, if known:	
			
	(iii)) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):	
		Vegetation type/percent cover. Explain:	
		Habitat for:	
		Federally Listed species. Explain findings:	
		☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:	
		Aquatic/wildlife diversity. Explain findings:	
3.	Cha	aracteristics of all wetlands adjacent to the tributary (if any)	
		All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.	
		pproximation () acres in total are being considered in the cumulative analysis.	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Adjac	ent Wetlands.	Check all that apply	and provide size	estimates in review area	:
	TNWs: 1	inear feet	width (ft), Or,	acres.		
	Wetlands adjac	ent to TNWs:	acres.			

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: .
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	Impoundments of jurisdictional waters. As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:					
	Identify water body and summarize rationale supporting determination:						
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.					
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):					
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.					
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.					
SEC	<u>CTIO</u>	NIV: DATA SOURCES.					
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.					
	\boxtimes	U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)					

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6523° N, Long112.6375° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS
Α.	RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the new area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are 30 (or more) river miles from TNW.

Project waters are **30 (or more)** river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 6 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	Biological Characteristics. Channel supports (check all that apply):
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		Other environmentally-sensitive species. Explain findings:
concentra	ations	
2	Cha	and the second and a discount to many TNIXV that flowed in a single sector into TNIXV
2.	Cna	aracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Physical Characteristics:
		(a) General Wetland Characteristics: Proportion:
		Properties: Wetland size: acres
		Wetland type. Explain: .
		Wetland quality. Explain: .
		Project wetlands cross or serve as state boundaries. Explain:
		(b) General Flow Relationship with Non-TNW:
		Flow is: Pick List. Explain:
		Surface flow is: Pick List
		Characteristics: .
		Subsurface flow: Pick List. Explain findings: .
		Dye (or other) test performed:
		(c) Wetland Adjacency Determination with Non-TNW:
		Directly abutting
		□ Not directly abutting
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
		Separated by berm/barrier. Explain:
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are Pick List river miles from TNW.
		Project waters are Pick List aerial (straight) miles from TNW.
		Flow is from: Pick List.
		Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Chemical Characteristics:
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		characteristics; etc.). Explain: Identify specific pollutants, if known:
	(iii)	Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
		Vegetation type/percent cover. Explain:
		Habitat for:
		Federally Listed species. Explain findings:
		☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
		☐ Aquatic/wildlife diversity. Explain findings:
_		
3.	Cha	aracteristics of all wetlands adjacent to the tributary (if any)
		All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.
		- pp

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	entify water body and summarize rationale supporting determination:
	ovide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.	ON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	ovide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ctors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional dgment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	ovide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such finding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
SEC	ON IV: DATA SOURCES.
A.	PPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked d requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6505° N, Long112.6365° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam.
	Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

acres.

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

☐ Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 8 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	\square	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:
concentra	tions	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: attify specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands ac	ljacent to TNWs:	acres.			

2.	 □ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: □ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Idei	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SE	<u>CTIO</u>	N IV: DATA SOURCES.
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

<u>SЕ</u> (CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
с.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6505° N, Long112.6378° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain: "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are 30 (or more) river miles from TNW.

Project waters are **30 (or more)** river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:						
	Tributary properties with respect to top of bank (estimate): Average width: 2 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).						
event (>0.01 i	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:						
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %						
	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:						
	Surface flow is: Discrete. Characteristics:						
	Subsurface flow: No . Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:						
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment sorting abrupt change in plant community						
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.						
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:						

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		logical Characteristics. Channel supports (check all that apply):
			Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		\boxtimes	Habitat for:
			Federally Listed species. Explain findings:
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
concentra	ations	s of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater bod sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
	~		
2.	Cha	aract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		sical Characteristics:
		(a)	General Wetland Characteristics:
			Properties: Wetland size: acres
			Wetland type. Explain: .
			Wetland quality. Explain: .
			Project wetlands cross or serve as state boundaries. Explain: .
		(b)	General Flow Relationship with Non-TNW:
		, ,	Flow is: Pick List. Explain:
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW:
			Directly abutting
			Not directly abutting
			☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		(1)	
		(a)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List.
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)		emical Characteristics:
		Cha	racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		T.J	characteristics; etc.). Explain: tify specific pollutants, if known:
		laer	titry specific pollutants, if known:
	(iii)) Biol	logical Characteristics. Wetland supports (check all that apply):
		H	Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain:
		H	Habitat for:
		_	Federally Listed species. Explain findings: .
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings: .
3.	Cha		eristics of all wetlands adjacent to the tributary (if any)
			wetland(s) being considered in the cumulative analysis: Pick List
		App	proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that a	apply and provide siz	ze estimates in review area:	
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	 RPWs that flow directly or indirectly into TNWs. ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are
	jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6495° N, Long112.6387° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
Γhe	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

c. Limits (boundaries) of jurisdiction based on: Pick List

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	TA.	T	X	7
			13	1	v	1

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

☐ Tributary flows through 5 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: ☐ Natural ☐ Artificial (man-made). Explain: ☐ Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 8 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: bed and banks the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics tidal gauges other (list):
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. https://doi.org/10.1001/j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:
concentra	ations	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Phy	sical Characteristics:
		(a)	General Wetland Characteristics: Properties:
			Wetland size: acres
			Wetland type. Explain: Wetland quality. Explain:
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW:
			Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List . Explain findings: Dye (or other) test performed:
		()	
		(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting
			☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain:
			Ecological connection. Explain:
			Separated by berm/barrier. Explain: .
		(d)	Proximity (Relationship) to TNW
			Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List.
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)		mical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
			characteristics; etc.). Explain: .
		Iden	tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
			Vegetation type/percent cover. Explain: .
			Habitat for: Federally Listed species. Explain findings:
			Fish/spawn areas. Explain findings:
			☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:
3.	Cha	racte	eristics of all wetlands adjacent to the tributary (if any)
3.	CHA	All	wetland(s) being considered in the cumulative analysis: Pick List
		App	roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that a	apply and provide siz	ze estimates in review area:	
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	 □ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: □ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:				
	Identify water body and summarize rationale supporting determination:					
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.				
F.	NOI	N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):				
	facto	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.				
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.				
SE	<u>CTIO</u>	N IV: DATA SOURCES.				
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.				
	Frov a firm	ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best profession ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres. vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where dding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres. NIV: DATA SOURCES. PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where chec requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf or the applicant/consultant: Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: U.S. Geological Survey Hydrologic Atlas: U.S.G. Sold Survey Hydrologic Atlas: U.S.D.A Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite scale & quad name: 7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)				

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION PEDODE COMPLETION DATE FOR ADDROVED HIDISDICTIONAL DETERMINATION (1D), 7/20/2014
Α.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 7/29/2014
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6515° N, Long112.6393° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS
Α.	RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			13	1	v	1

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is:
	Tributary properties with respect to top of bank (estimate): Average width: 9 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: $\overline{\text{No}}$. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. \square Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: bed and banks the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics tidal gauges other (list):
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. atify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply): □ Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet □ Wetland fringe. Characteristics: □ Habitat for: □ Federally Listed species. Explain findings: □ Fish/spawn areas. Explain findings: □ Other environmentally-sensitive species. Explain findings: □ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors	
concentrations of food sources and shelter for mammals, birds, and reptiles, than surrounding uplar	
2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly in	to TNW
(i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:	
(b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:	
Surface flow is: Pick List Characteristics:	
Subsurface flow: Pick List . Explain findings: Dye (or other) test performed: .	
(c) Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:	
(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.	
 (ii) Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; vecharacteristics; etc.). Explain: Identify specific pollutants, if known: . 	water quality; general watershed
(iii) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:	
3. Characteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analy	⁄sis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands ad	ljacent to TNWs:	acres.	

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	seasonany
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Idei	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.	NOI	N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
		☐ USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

<u>SE(</u> A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
с.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6544° N, Long112.64° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
The revi	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

 $^{^{1}}$ Boxes checked below shall be supported by completing the appropriate sections in Section III below. ² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW^5 : Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: bed and banks the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. atify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:
concentrat	tions	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Phy	sical Characteristics:
		(a)	General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain:
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: https://example.com/racteristics/processes/p
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that a	pply and provide size es	timates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
TC	OI ATED HNTEDSTATE OD INTDA STATEJ WATEDS INCLIDING ISOLATED WETLANDS THE LISE
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	N IV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6492° N. Long112.6449° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
Γhe	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

c. Limits (boundaries) of jurisdiction based on: Pick List

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

☐ Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW^5 : Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 8 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

(i			ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentration	ons	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. C	hai	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i			Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(i		Char	mical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
((iii)		ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. C		All v	eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide	size estimates in review area:	
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	ljacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
TO	
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY): 10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:					
	Identify water body and summarize rationale supporting determination:					
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.				
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):				
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.				
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.				
SEC	CTIO	NIV: DATA SOURCES.				
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.				

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

Α.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6551° N, Long112.6409° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS
	RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	are Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW^5 : Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 4 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands □ Concrete □ Cobbles □ Gravel □ Muck □ Bedrock □ Vegetation. Type/% cover: □ Other. Explain: .
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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	(iv)	\square	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for:
			☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings: .
concentr	ations	s of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	aract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
			rsical Characteristics:
	(1)		General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: cracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: httify specific pollutants, if known:
	(iii	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and A	djacent Wetlands.	Check all that a	apply and provide s	ize estimates in review area	ı:
	TNWs:	linear feet	width (ft), Or,	acres.		
	■ Wetlands	adjacent to TNWs:	acres.			

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: .
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:					
	Identify water body and summarize rationale supporting determination:					
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.				
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):				
	factor judg	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.				
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.				
SEC	CTIO	NIV: DATA SOURCES.				
	SUPF and	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.				
		Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.				

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6391° N, Long112.6412° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

b. Identify (estimate) size of waters of the U.S. in the review area:

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are 30 (or more) river miles from TNW.

Project waters are **30 (or more)** river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 12 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics tidal gauges other (list):
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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	(iv)		logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	ations	s of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain:
			Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: cracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: chtify specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide s	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	RPWs that flow directly or indirectly into TNWs. ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are
	jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
A.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.639° N, Long112.6414° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
SE	CTION II: SUMMARY OF FINDINGS
	RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters

Wetlands: acres.

b. Identify (estimate) size of waters of the U.S. in the review area:

linear feet:

c. Limits (boundaries) of jurisdiction based on: **Pick List** Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

Isolated (interstate or intrastate) waters, including isolated wetlands

width (ft) and/or 0 acres.

Non-wetland waters:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are 30 (or more) river miles from TNW.

Project waters are **30 (or more)** river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 11 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	tions	of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	weristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide s	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
•~~	
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:			
	Identify water body and summarize rationale supporting determination:				
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.			
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):			
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.			
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.			
SEC	CTIO	NIV: DATA SOURCES.			
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.			

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
A.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6423° N, Long112.6426° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

b. Identify (estimate) size of waters of the U.S. in the review area:

Impoundments of jurisdictional waters

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:					
	Tributary properties with respect to top of bank (estimate): Average width: 4 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).					
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:					
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %					
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:					
	Surface flow is: Discrete. Characteristics:					
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:					
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community					
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:					
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:					

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	Biological Characteristics. Channel supports (check all that apply):	
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:	
		Habitat for:	
		Federally Listed species. Explain findings:	
		Fish/spawn areas. Explain findings:	
		Other environmentally-sensitive species. Explain findings:	
concentra	ations	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater s of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.	
2	Cha	and desirable of modern de adicionate to many TNNNV also a flore discoultre on in discoultre into TNNNV	
2.	Cna	aracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW	
	(i)	Physical Characteristics:	
		(a) General Wetland Characteristics: Proporties:	
		Properties: Wetland size: acres	
		Wetland type. Explain: .	
		Wetland quality. Explain: .	
		Project wetlands cross or serve as state boundaries. Explain:	
		(b) General Flow Relationship with Non-TNW:	
		Flow is: Pick List . Explain:	
		Surface flow is: Pick List	
		Characteristics: .	
		Subsurface flow: Pick List. Explain findings: .	
		Dye (or other) test performed:	
		(c) Wetland Adjacency Determination with Non-TNW:	
		Directly abutting	
		□ Not directly abutting	
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:	
		Separated by berm/barrier. Explain:	
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are Pick List river miles from TNW.	
		Project waters are Pick List aerial (straight) miles from TNW.	
		Flow is from: Pick List.	
		Estimate approximate location of wetland as within the Pick List floodplain.	
	(ii)	Chemical Characteristics:	
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed	
		characteristics; etc.). Explain: Identify specific pollutants, if known:	
	(iii)) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):	
		Vegetation type/percent cover. Explain:	
		Habitat for:	
		Federally Listed species. Explain findings:	
		Fish/spawn areas. Explain findings:	
		☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:	
3.	Cha	aracteristics of all wetlands adjacent to the tributary (if any)	
		All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.	
		Approximately () acres in total are being considered in the cumulative aliarysis.	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and A	djacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands a	djacent to TNWs:	acres.	

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISC	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
		National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6414° N. Long112.643° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam.
	Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

acres.

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

☐ Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:				
	Tributary properties with respect to top of bank (estimate): Average width: 12 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).				
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:				
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %				
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days ne Project Area. Other information on duration and volume:				
	Surface flow is: Discrete. Characteristics:				
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:				
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community				
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.				
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:				

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

(iv)	Biological Characteristics. Channel supports (check all that apply): ☐ Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. ☐ Wetland fringe. Characteristics: ☐ Habitat for: ☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
concentrations	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. Cha	racteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i)	Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
	(b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
	Surface flow is: Pick List Characteristics:
	Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
	(c) Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
	(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(ii)	Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Identify specific pollutants, if known:
(iii)	Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. Cha	Approximately () acres in total are being considered in the cumulative analysis: Approximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

l.	TNWs and A	djacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	■ Wetlands a	adjacent to TNWs:	acres.	

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
1)E	CRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY): 10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
	$\overline{\boxtimes}$	

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6428° N, Long112.6415° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam.
	Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: **Pick List** Elevation of established OHWM (if known):

acres.

Wetlands:

^{2.} Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months)

⁽e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			13	1	v	1

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is:
	Tributary properties with respect to top of bank (estimate): Average width: 13 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Cobbles Gravel Bedrock Other. Explain: Concrete Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: $\overline{\text{No}}$. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. \square Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: bed and banks the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics tidal gauges other (list):
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. atify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply): ☐ Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. ☐ Wetland fringe. Characteristics: ☐ Habitat for: ☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:	
Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat gre concentrations of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.	ater
2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW	
(i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:	
(b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:	
Surface flow is: Pick List Characteristics:	
Subsurface flow: Pick List . Explain findings: Dye (or other) test performed:	
(c) Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:	
(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.	
 (ii) Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Identify specific pollutants, if known: 	d
(iii) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:	
3. Characteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	GRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
<u>SE</u>	CTIO	NIV: DATA SOURCES.
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6336° N, Long112.6436° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

		w

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 2 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentrat	tions	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that a	apply and provide siz	ze estimates in review area:	
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: .
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:				
	Identify water body and summarize rationale supporting determination:					
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.				
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):				
	factor judg	ride acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.				
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.				
SEC	CTIO	NIV: DATA SOURCES.				
	SUPH and	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.				
	\bowtie	Photographs: [X] Aerial (Name & Date):Google Earth, May 26, 2013.				

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

<u>SЕ</u> (CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6334° N, Long112.6436° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:				
	Tributary properties with respect to top of bank (estimate): Average width: 2 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).				
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:				
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %				
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:				
	Surface flow is: Discrete. Characteristics:				
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:				
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community				
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.				
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:				

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	\square	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		X	Habitat for: ☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentr	ation	s of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Phy	vsical Characteristics:
	(-)		General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: artify specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands ad	ljacent to TNWs:	acres.	

2.	 □ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: □ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:				
	Identify water body and summarize rationale supporting determination:				
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.			
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):			
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.			
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.			
SEC	CTIO	NIV: DATA SOURCES.			
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.			

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6334° N, Long112.6437° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required
	 1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs

b. Identify (estimate) size of waters of the U.S. in the review area:

Impoundments of jurisdictional waters

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Isolated (interstate or intrastate) waters, including isolated wetlands

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is:
	Tributary properties with respect to top of bank (estimate): Average width: 6 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. ⁷ Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. https://doi.org/10.1001/j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply): ☐ Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. ☐ Wetland fringe. Characteristics: ☐ Habitat for: ☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentrations of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
(b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
Surface flow is: Pick List Characteristics:
Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
(c) Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
 (ii) Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Identify specific pollutants, if known:
(iii) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. Characteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Adj	acent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands ad	jacent to TNWs:	acres.	

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	Impoundments of jurisdictional waters. As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
TO	
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:				
	Identify water body and summarize rationale supporting determination:				
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.			
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):			
	facto	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.			
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.			
SEC	<u>CTIO</u>	N IV: DATA SOURCES.			
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.			

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6555° N, Long112.6444° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
SE(CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
The revi	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

b. Identify (estimate) size of waters of the U.S. in the review area:

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	Т	N	A

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

☐ Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 6 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Survey to available datum; Sine shell or debris deposits (foreshore) Ophysical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Ophysical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	tions	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that a	apply and provide siz	ze estimates in review area:	
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Iden	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	factor judg	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPH and	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

Α.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6432° N, Long112.6441° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
SE	CTION II: SUMMARY OF FINDINGS
A.	RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
1110	with the waters of the o.s. within clean water ret (CW14) jurisdiction (as defined by 35 Cl K part 320) in the leview area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

acres.

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 6 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: The presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

(i	iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentration	ons	of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. (Chai	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i			Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(i		Char	mical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
((iii)		ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. C		All v	eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: .
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:					
	Identify water body and summarize rationale supporting determination:						
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.					
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):					
	factor judg	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.					
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.					
SEC	CTIO	NIV: DATA SOURCES.					
	SUPH and	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.					
	\boxtimes						

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6357° N, Long112.644° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS
Α.	RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	TA.	T	X	7
			13	1	v	1

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:					
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).					
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:					
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %					
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:					
	Surface flow is: Discrete. Characteristics:					
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:					
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community					
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.					
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:					

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		logical Characteristics. Channel supports (check all that apply):
			Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		\boxtimes	Habitat for:
			Federally Listed species. Explain findings:
			Fish/spawn areas. Explain findings: Other previous receives receives findings:
			☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	ations	s of f	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ıract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Phy	rsical Characteristics:
		(a)	General Wetland Characteristics:
			Properties:
			Wetland size: acres Wetland type. Explain: .
			Wetland quality. Explain: .
			Project wetlands cross or serve as state boundaries. Explain: .
		(h)	General Flow Relationship with Non-TNW:
		(0)	Flow is: Pick List. Explain:
			Surface flow is: Pick List
			Characteristics:
			Subsurface flow: Pick List . Explain findings: Dye (or other) test performed:
			Dyc (of outer) test performed.
		(c)	Wetland Adjacency Determination with Non-TNW:
			Directly abutting Not directly abutting
			☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain:
			Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW
		` '	Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List . Estimate approximate location of wetland as within the Pick List floodplain.
			Estimate approximate location of wettand as within the rick List moodplain.
	(ii)		emical Characteristics:
		Cha	racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:
		Ide	ntify specific pollutants, if known:
	(***)	. D	Land Character Wildow Language (Analysis and Analysis and
	(111)) B10.	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
		Ħ	Vegetation type/percent cover. Explain:
			Habitat for:
			Federally Listed species. Explain findings:
			☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings:
	_		
3.	Cha		eristics of all wetlands adjacent to the tributary (if any)
			wetland(s) being considered in the cumulative analysis: Pick List proximately () acres in total are being considered in the cumulative analysis.
		, , 1	nonlineary () acres in total are coming considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and A	djacent Wetlands.	Check all that	apply and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	■ Wetlands	adjacent to TNWs:	acres.	

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	seasonany.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:				
Identify water body and summarize rationale supporting determination:				
vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.				
N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):				
ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.				
vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such adding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.				
N IV: DATA SOURCES.				
PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.				

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6276° N, Long112.6441° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS
Α.	RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the new area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
B.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 5 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: Tributary has (check all that apply): the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics tidal gauges other (list):
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	Biological Characteristics. Channel supports (check all that apply):
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		Other environmentally-sensitive species. Explain findings:
concentra	ations	☐ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater sof food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2	Cha	and a standard of smaller de a discount to many TNNNV that flowed in a single contract to the TNNNV
2.	Cna	aracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Physical Characteristics:
		(a) General Wetland Characteristics: Proportion:
		Properties: Wetland size: acres
		Wetland type. Explain: .
		Wetland quality. Explain: .
		Project wetlands cross or serve as state boundaries. Explain:
		(b) General Flow Relationship with Non-TNW:
		Flow is: Pick List. Explain:
		Surface flow is: Pick List
		Characteristics: .
		Subsurface flow: Pick List. Explain findings: .
		Dye (or other) test performed:
		(c) Wetland Adjacency Determination with Non-TNW:
		☐ Directly abutting
		□ Not directly abutting
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
		Separated by berm/barrier. Explain:
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are Pick List river miles from TNW.
		Project waters are Pick List aerial (straight) miles from TNW.
		Flow is from: Pick List.
		Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Chemical Characteristics:
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		characteristics; etc.). Explain: Identify specific pollutants, if known:
	(111)	Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
		Vegetation type/percent cover. Explain:
		Habitat for:
		Federally Listed species. Explain findings: .
		☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
		☐ Aquatic/wildlife diversity. Explain findings:
_	~-	
3.	Cha	aracteristics of all wetlands adjacent to the tributary (if any)
		All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.
		- Approximately () detect in total are come considered in the confidence analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide	size estimates in review area:	
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands adjacent to TNWs:		acres.			

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	seasonany
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Identify water body and summarize rationale supporting determination:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.	NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above): Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource:
	Wetlands: acres. Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
SEC	CTION IV: DATA SOURCES.
A. 1	SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s). FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6262° N. Long112.6442° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
Τhe	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 12 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	\square	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for:
			 ☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
concentr	ations	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater good sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		vsical Characteristics: General Wetland Characteristics:
		()	Properties:
			Wetland size: acres
			Wetland type. Explain: Wetland quality. Explain:
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List.
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: uracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: utify specific pollutants, if known:
		idei	intry specific polititants, it known.
	(iii)	Bio	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for:
		_	☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands ad	jacent to TNWs:	acres.	

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	seasonany
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	N IV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps:
		100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: ☐ Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6262° N, Long112.6442° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is:
	Tributary properties with respect to top of bank (estimate): Average width: 12 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Other. Explain: Concrete Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: bed and banks the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics tidal gauges other (list):
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. atify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply): □ Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. □ Wetland fringe. Characteristics: □ Habitat for: □ Federally Listed species. Explain findings: □ Fish/spawn areas. Explain findings: □ Other environmentally-sensitive species. Explain findings: □ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater concentrations of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
(b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
Surface flow is: Pick List Characteristics:
Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
(c) Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
 (ii) Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Identify specific pollutants, if known:
(iii) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. Characteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Adja	acent Wetlands.	Check all that apply	and provide size	estimates in review a	rea:
	TNWs:	linear feet	width (ft), Or,	acres.		
	■ Wetlands adj	acent to TNWs:	acres.			

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	N IV: DATA SOURCES.
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date):	
Previous determination(s). File no. and date of response le	tter: .
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6354° N, Long112.6442° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS
Α.	RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

Wetlands:

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	N	X/
			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW^5 : Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is:					
	Tributary properties with respect to top of bank (estimate): Average width: 8 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).					
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Other. Explain: Concrete Muck					
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %					
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:					
	Surface flow is: Discrete. Characteristics:					
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:					
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community					
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:					
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:					

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

	(iv)		logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	ations	of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain:
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: cracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	ljacent Wetlands.	Check all that a	apply and provide siz	e estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	GRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	N IV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6273° N, Long112.6444° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and
	Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

acres.

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

Wetlands:

Non-regulated waters/wetlands (check if applicable):³

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is:
	Tributary properties with respect to top of bank (estimate): Average width: 5 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: bed and banks the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics tidal gauges other (list):
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. atify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(i		\square	ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentration	ons	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. C	har	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i		(a)	sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
			General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: □ Directly abutting □ Not directly abutting □ Discrete wetland hydrologic connection. Explain: □ Ecological connection. Explain: □ Separated by berm/barrier. Explain:
			Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(i		Char	mical Characteristics: cacterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
(iii)		ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. C		All v	eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
Identify water body and summarize rationale supporting determination:
Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
TION IV: DATA SOURCES.
UPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6255° N, Long112.6443° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	h Identify (estimate) size of waters of the U.S. in the review area.

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

acres.

Non-regulated waters/wetlands (check if applicable):³

linear feet: width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	N	X/
			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles Drainage area: 3 square miles Average annual rainfall: 7 inches Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: bed and banks the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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(i			ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentration	ons	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. 0	hai	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i			sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: □ Directly abutting □ Not directly abutting □ Discrete wetland hydrologic connection. Explain: □ Ecological connection. Explain: □ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(i		Char	mical Characteristics: cacterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
((iii)		ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. C		All v	veristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and A	ljacent Wetlands.	Check all that a	apply and provide s	size estimates in review a	rea:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY): 10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6284° N, Long112.6446° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

b. Identify (estimate) size of waters of the U.S. in the review area:

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			13	1	v	1

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 5 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:
concentra	tions	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Phys	sical Characteristics:
		(a)	General Wetland Characteristics: Properties:
			Wetland size: acres
			Wetland type. Explain: .
			Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		<i>a</i> .	
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List . Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting
			☐ Not directly abutting
			☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		(4)	Drawinity (Deletionship) to TNW
		(a)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List . Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)		mical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
			characteristics; etc.). Explain: .
		Iden	tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply):
		\Box	Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain:
		H	Habitat for:
			Federally Listed species. Explain findings: .
			☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings:
3.	Cha	racte	eristics of all wetlands adjacent to the tributary (if any)
٠.		All v	wetland(s) being considered in the cumulative analysis: Pick List
		App	roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and A	Adjacent Wetlands.	Check all that	apply and provide s	ize estimates in review area:	
	TNWs:	linear feet	width (ft), Or,	acres.		
	■ Wetlands	adjacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
TO	
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	wide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	N IV: DATA SOURCES.
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date):	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

<u>SЕ</u> (CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
с.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6325° N, Long112.6453° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW^5 : Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:					
	Tributary properties with respect to top of bank (estimate): Average width: 5 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).					
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:					
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %					
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:					
	Surface flow is: Discrete. Characteristics:					
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:					
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community					
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.					
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:					

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	Biol	ogical Characteristics. Channel supports (check all that apply):
			Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side.
			Wetland fringe. Characteristics: .
		\boxtimes	Habitat for:
			Federally Listed species. Explain findings: .
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	ations	of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
			F, 8-1
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Phys	sical Characteristics:
	()		General Wetland Characteristics:
			Properties:
			Wetland size: acres
			Wetland type. Explain: .
			Wetland quality. Explain: .
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW:
			Flow is: Pick List . Explain: .
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW:
			Directly abutting
			Not directly abutting
			Discrete wetland hydrologic connection. Explain:
			Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		(1)	D ' ' (D 1 (' 1') (TNIW)
		(a)	Proximity (Relationship) to TNW
			Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List .
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Che	mical Characteristics:
	(11)		racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		Cirui	characteristics; etc.). Explain: .
		Iden	tify specific pollutants, if known:
		10011	and specific polaritation, in this wife
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply):
			Riparian buffer. Characteristics (type, average width):
		\sqcap	Vegetation type/percent cover. Explain: .
		\sqcap	Habitat for:
		_	Federally Listed species. Explain findings: .
			Fish/spawn areas. Explain findings: .
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings: .
3.	Cha		eristics of all wetlands adjacent to the tributary (if any)
			wetland(s) being considered in the cumulative analysis: Pick List
		App	roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Adj	jacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands ad	jacent to TNWs:	acres.	

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: .
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:						
Identify water body and summarize rationale supporting determination:						
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nal						
such						
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•1						

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6324° N, Long112.6455° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 4 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

(iv) Biological Characteristics. Channel supports (ch ☐ Riparian corridor. Characteristics (type, average ☐ Wetland fringe. Characteristics: ☐ Habitat for: ☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:	ge width): xeroriparian, 0-5 feet wide on either side xplain findings:
Aquatic/wildlife diversity. Explain finding concentrations of food sources and shelter for mammals, birds, and	s: Ephemeral riparian corridors typically provide somewhat greater reptiles, than surrounding upland areas.
2. Characteristics of wetlands adjacent to non-TNW that	t flow directly or indirectly into TNW
(i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state bounda	ries. Explain:
(b) <u>General Flow Relationship with Non-TNW:</u> Flow is: Pick List . Explain:	
Surface flow is: Pick List Characteristics:	
Subsurface flow: Pick List . Explain findings: Dye (or other) test performed:	
(c) Wetland Adjacency Determination with Non-T Directly abutting Not directly abutting Discrete wetland hydrologic connection Ecological connection. Explain: Separated by berm/barrier. Explain:	
(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from Project waters are Pick List aerial (straight) m Flow is from: Pick List. Estimate approximate location of wetland as w	iles from TNW.
 (ii) Chemical Characteristics: Characterize wetland system (e.g., water color is clean characteristics; etc.). Explain: Identify specific pollutants, if known: 	ear, brown, oil film on surface; water quality; general watershed
(iii) Biological Characteristics. Wetland supports (characteristics) (type, average Riparian buffer. Characteristics (type, average Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. E Aquatic/wildlife diversity. Explain finding	width):
3. Characteristics of all wetlands adjacent to the tributa All wetland(s) being considered in the cumulative a Approximately () acres in total are being considered.	nalysis: Pick List

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

l.	TNWs and A	djacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	■ Wetlands a	adjacent to TNWs:	acres.	

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Scasonary.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
Id	lentify water body and summarize rationale supporting determination:
Pr	rovide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: . Wetlands: acres.
F. No	ON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
fa	rovide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ctors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional dgment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	rovide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such finding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
<u>SECTI</u>	ION IV: DATA SOURCES.
A. SU	PPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked de requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
far jur	Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above): voide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR ctors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best profession dement (check all that apply): Non-wetland waters (i.e., rivers, streams): Inear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres. voide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where stinding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): Inear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres. Wetlands: acres. ONIV: DATA SOURCES. PPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant: Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Office does not concur with data sheets/delineation report. Usas SNHD data. UsGS 8 and 12 digit HUC maps. U.S. Geological Survey Hydrologic Atlas: USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: 7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s): Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps:

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SEO A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6276° N, Long112.6451° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

c. Limits (boundaries) of jurisdiction based on: Pick List

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 5 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:
concentra	tions	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List aroximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that a	apply and provide siz	ze estimates in review area:	
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	N IV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6273° N, Long112.6454° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

b. Identify (estimate) size of waters of the U.S. in the review area:

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW^5 : Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 6 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

(i			ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentration	ons	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. 0	hai	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i			Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(i		Char	mical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
((iii)		ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. C		All v	eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and A	ljacent Wetlands.	Check all that a	apply and provide s	size estimates in review a	rea:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6273° N, Long112.6458° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
SE	CTION II: SUMMARY OF FINDINGS
A.	RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

acres.

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	N	X/
			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:					
	Tributary properties with respect to top of bank (estimate): Average width: 7 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).					
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck					
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %					
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:					
	Surface flow is: Discrete. Characteristics:					
	Subsurface flow: No . Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:					
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community					
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:					
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:					

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply):
			Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
			Habitat for:
			Federally Listed species. Explain findings:
			☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	ations	s of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		sical Characteristics:
		(a)	General Wetland Characteristics: Properties:
			Wetland size: acres
			Wetland type. Explain: .
			Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
			Troject wettained cross of serve as state boundaires. Explain.
		(b)	General Flow Relationship with Non-TNW:
			Flow is: Pick List. Explain:
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings:
			Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW:
			☐ Directly abutting ☐ Not directly abutting
			☐ Discrete wetland hydrologic connection. Explain:
			Ecological connection. Explain:
			Separated by berm/barrier. Explain: .
		(d)	Proximity (Relationship) to TNW
			Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List .
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)		mical Characteristics:
		Cha	racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		Iden	characteristics; etc.). Explain:
	(***)	. D. 1	
	(111)		ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
			Vegetation type/percent cover. Explain: .
			Habitat for:
			Federally Listed species. Explain findings: Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings:
3.	Cha	racte	eristics of all wetlands adjacent to the tributary (if any)
		All v	wetland(s) being considered in the cumulative analysis: Pick List
		App	roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands ac	ljacent to TNWs:	acres.	

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

Other factors. Explain: Identify water body and summarize rationale supporting determination:				
1				
ch				
ed				

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SEC	CTION I: BACKGROUND INFORMATION
Α.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6375° N, Long112.6463° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	are Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	are Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Impoundments of jurisdictional waters

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Cobbles Gravel Bedrock Other. Explain: Muck Concrete Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentrat	tions	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	ljacent Wetlands.	Check all that a	apply and provide siz	e estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	 RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SEO A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6399° N, Long112.6464° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below. ² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally"

⁽e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 5 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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	(iv)	\square	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:
concentra	ations	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	-	General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: tracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Bio	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	ljacent Wetlands.	Check all that a	apply and provide siz	e estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
TO	
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Iden	tify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	factor judg	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SE(CTIO	NIV: DATA SOURCES.
	SUPH and	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
		C 1

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

<u>SЕ</u> (CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6553° N, Long112.6463° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 ☐ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. ☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

TNW

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 4 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 9 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentrat	tions	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics: .
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	mical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide	size estimates in review a	rea:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	ljacent to TNWs:	acres.			

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
Α.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.641° N, Long112.6465° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

Wetlands:

b. Identify (estimate) size of waters of the U.S. in the review area:

linear feet:

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

width (ft) and/or 0 acres.

Non-wetland waters:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	N	X/
			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:				
	Tributary properties with respect to top of bank (estimate): Average width: 4 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).				
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:				
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %				
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:				
	Surface flow is: Discrete. Characteristics:				
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:				
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community				
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.				
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:				

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	\square	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:
concentra	itions	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	-	General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: tracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: titify specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Adja	acent Wetlands.	Check all that apply	and provide size	estimates in review are	ea:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands adj	acent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
TC	OI ATED HNTEDSTATE OD INTDA STATEJ WATEDS INCLIDING ISOLATED WETLANDS THE LISE
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	fi	which are or could be used by interstate or foreign travelers for recreational or other purposes. rom which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ident	tify water body and summarize rationale supporting determination:
		de estimates for jurisdictional waters in the review area (check all that apply): Cributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Vetlands: acres.
F.		I-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	factor	de acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR rs (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional nent (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a find	de acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ling is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
SE	CTION	NIV: DATA SOURCES.
A.	and re	ORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked equested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
с.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6379° N, Long112.6466° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and
	Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

acres.

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

Wetlands:

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 6 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Cobbles Gravel Bedrock Other. Explain: Muck Concrete Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain:
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

(i·	Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:
concentratio	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ns of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. C	haracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i)	Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
	(b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
	Surface flow is: Pick List Characteristics:
	Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
	(c) Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
	(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(ii	Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Identify specific pollutants, if known:
(i	ii) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Gish/spawn areas. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. C	haracteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide	size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands ac	djacent to TNWs:	acres.		

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	GRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:	
Identify water body and summarize rationale supporting determination:	
Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.	
F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): ☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. ☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. ☐ Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on "Migratory Bird Rule" (MBR). ☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: ☐ Other: (explain, if not covered above):	the
Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professi judgment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.	
Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where a finding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.	such
SECTION IV: DATA SOURCES.	
A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where che and requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs:	cked

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
A.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6481° N, Long112.6468° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) İnto which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

$\mbox{\bf b.}\;\;\mbox{Identify}\;\mbox{(estimate)}\;\mbox{size}\;\mbox{of waters}\;\mbox{of}\;\mbox{the}\;\mbox{U.S.}\;\mbox{in}\;\mbox{the}\;\mbox{review}\;\mbox{area:}\;$

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Impoundments of jurisdictional waters

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Isolated (interstate or intrastate) waters, including isolated wetlands

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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	(iv)	Biological Characteristics. Channel supports (check all that apply):	
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:	
		Habitat for:	
		Federally Listed species. Explain findings:	
		Fish/spawn areas. Explain findings:	
		Other environmentally-sensitive species. Explain findings:	
concentra	ations	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater s of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.	
2	Cha	TNIXV about the second to the	
2.	Cna	aracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW	
	(i)	Physical Characteristics:	
		(a) General Wetland Characteristics: Proportion:	
		Properties: Wetland size: acres	
		Wetland type. Explain: .	
		Wetland quality. Explain: .	
		Project wetlands cross or serve as state boundaries. Explain:	
		(b) General Flow Relationship with Non-TNW:	
		Flow is: Pick List. Explain:	
		Surface flow is: Pick List	
		Characteristics: .	
		Subsurface flow: Pick List. Explain findings: .	
		Dye (or other) test performed: .	
		(c) Wetland Adjacency Determination with Non-TNW:	
		Directly abutting	
		□ Not directly abutting	
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:	
		Separated by berm/barrier. Explain:	
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are <u>Pick List</u> river miles from TNW.	
		Project waters are Pick List aerial (straight) miles from TNW.	
		Flow is from: Pick List.	
		Estimate approximate location of wetland as within the Pick List floodplain.	
	(ii)	Chemical Characteristics:	
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed	
		characteristics; etc.). Explain: Identify specific pollutants, if known:	
	(***)	Piletal Character Walled and Archael all data and b	
	(III)) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):	
		Vegetation type/percent cover. Explain:	
		Habitat for:	
		Federally Listed species. Explain findings:	
		☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:	
		Aquatic/wildlife diversity. Explain findings:	
_	~-		
3.	Cha	aracteristics of all wetlands adjacent to the tributary (if any)	
		All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.	
		- 1-pp	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that a	apply and provide siz	ze estimates in review area:	
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
10/	OI ATEN HINTEDSTATE OD INTDA STATELWATEDS INSTITUTIOS ISOLATEN WETLANDS THE USE
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	tify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SE(CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
		Photographs: Marial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6266° N, Long112.6467° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	h Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

acres.

Non-regulated waters/wetlands (check if applicable):³

linear feet: width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1.	TNW

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles Drainage area: 3 square miles Average annual rainfall: 7 inches Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 9 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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(i			ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentration	ons		od sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. C	har	racte	ristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i		(a)	Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
			General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
			Wetland Adjacency Determination with Non-TNW: □ Directly abutting □ Not directly abutting □ Discrete wetland hydrologic connection. Explain: □ Ecological connection. Explain: □ Separated by berm/barrier. Explain:
			Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(i		Char	mical Characteristics: cacterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
(iii)		ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. C		All v	ristics of all wetlands adjacent to the tributary (if any) vetland(s) being considered in the cumulative analysis: Pick List roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

l.	TNWs and Ac	ljacent Wetlands.	Check all that	apply and provide size estimates in review area:	:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Idei	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	fact	wide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional gment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		wide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such adding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	ON IV: DATA SOURCES.
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION
Α.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.632° N, Long112.6466° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands:

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	N	X/
			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles Drainage area: 3 square miles Average annual rainfall: 7 inches Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: ☐ Natural ☐ Artificial (man-made). Explain: ☐ Manipulated (man-altered). Explain:					
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).					
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:					
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %					
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:					
	Surface flow is: Discrete. Characteristics:					
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:					
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. ⁷ Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community					
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.					
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. https://doi.org/10.1001/j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.					

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(i			ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentration	ons	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. 0	hai	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i			sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: □ Directly abutting □ Not directly abutting □ Discrete wetland hydrologic connection. Explain: □ Ecological connection. Explain: □ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(i		Char	mical Characteristics: cacterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
((iii)		ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. C		All v	veristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and A	ljacent Wetlands.	Check all that a	apply and provide s	size estimates in review a	rea:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY): 10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6402° N, Long112.647° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
Τhe	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

c. Limits (boundaries) of jurisdiction based on: Pick List

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 6 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	gical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
	ad sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. Character	ristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(a) <u>(</u>	ical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
:	Surface flow is: Pick List Characteristics: .
	Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
(c) <u>\</u>	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
]]]	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
Chara	nical Characteristics: acterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: ify specific pollutants, if known:
	gical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
All w	ristics of all wetlands adjacent to the tributary (if any) etland(s) being considered in the cumulative analysis: Pick List eximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and A	djacent Wetlands.	Check all that a	apply and provide si	ze estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	■ Wetlands :	adjacent to TNWs:	acres.		

2.	 RPWs that flow directly or indirectly into TNWs. ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: .
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	entify water body and summarize rationale supporting determination:
	ovide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.	ON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	ovide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ctors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional dgment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	ovide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such inding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
<u>SE</u>	ON IV: DATA SOURCES.
A.	PPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked d requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.625° N, Long112.647° W.
	Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
The	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

acres.

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

Wetlands:

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 5 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	tions	of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain:
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: https://example.com/racteristics/racteris
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide s	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	 □ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: □ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
<u>SE</u>	CTIO	N IV: DATA SOURCES.
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
Α.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6253° N, Long112.647° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

Wetlands: acres.

b. Identify (estimate) size of waters of the U.S. in the review area:

linear feet:

c. Limits (boundaries) of jurisdiction based on: Pick List

Non-regulated waters/wetlands (check if applicable):³

Elevation of established OHWM (if known):

width (ft) and/or 0 acres.

Non-wetland waters:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is:
	Tributary properties with respect to top of bank (estimate): Average width: 5 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain:
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: aracterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. https://doi.org/10.1001/j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

	(iv)	Biological Characteristics. Channel supports (check all that apply):
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		Other environmentally-sensitive species. Explain findings:
concentra	ations	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2	Cha	we should be a found and a discount to your TNIXV that flow discoult are in discoult into TNIXV
2.	Cna	racteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Physical Characteristics:
		(a) General Wetland Characteristics:
		Properties: Wetland size: acres
		Wetland type. Explain: .
		Wetland quality. Explain: .
		Project wetlands cross or serve as state boundaries. Explain:
		(b) General Flow Relationship with Non-TNW:
		Flow is: Pick List . Explain: .
		Surface flow is: Pick List
		Characteristics: .
		Subsurface flow: Pick List. Explain findings: .
		Dye (or other) test performed: .
		(c) Wetland Adjacency Determination with Non-TNW:
		Directly abutting
		□ Not directly abutting
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
		Separated by berm/barrier. Explain: .
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are Pick List river miles from TNW.
		Project waters are Pick List aerial (straight) miles from TNW.
		Flow is from: Pick List.
		Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Chemical Characteristics:
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		characteristics; etc.). Explain: Identify specific pollutants, if known:
	(iii)	Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
		Vegetation type/percent cover. Explain:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:
3.	Cha	racteristics of all wetlands adjacent to the tributary (if any)
		All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.
		Approximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands a	djacent to TNWs:	acres.	

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	N IV: DATA SOURCES.
A.	and	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6535° N, Long112.648° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS
Α.	RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the new area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
B.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

Wetlands:

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	N	X/
			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:					
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).					
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:					
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %					
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:					
	Surface flow is: Discrete. Characteristics:					
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:					
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community					
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.					
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:					

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	\square	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		X	Habitat for: ☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentr	ations	s of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Phy	vsical Characteristics:
	(-)		General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: artify specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands ad	ljacent to TNWs:	acres.	

2.	 □ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: □ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

<u> SE (</u> А.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
с.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6351° N, Long112.6473° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and
	Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres

$\textbf{c. Limits (boundaries) of jurisdiction} \ based \ on: \\ \underline{\textbf{Pick List}}$

acres.

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.
² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally"

⁽e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 5 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:					
	Tributary properties with respect to top of bank (estimate): Average width: 9 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).					
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:					
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %					
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days the Project Area. Other information on duration and volume:					
	Surface flow is: Discrete. Characteristics:					
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:					
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment sorting abrupt change in plant community					
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.					
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:					

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

(iv) Biological Characteristics. Channel supports (check all that apply): ☐ Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. ☐ Wetland fringe. Characteristics: ☐ Habitat for: ☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentrations of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
(b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
Surface flow is: Pick List Characteristics:
Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
(c) Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
 (ii) Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Identify specific pollutants, if known:
(iii) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. Characteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Adj	acent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands ad	jacent to TNWs:	acres.	

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	Impoundments of jurisdictional waters. As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
TO	
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	N IV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SEC A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
С.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6425° N, Long112.6477° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	Т	N	A

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

☐ Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 6 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Survey to available datum; Sine shell or debris deposits (foreshore) Ophysical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Ophysical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	tions	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that a	apply and provide siz	ze estimates in review area:	
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Iden	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	factor judg	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPH and	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
A.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6258° N, Long112.6476° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) İnto which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

b. Identify (estimate) size of waters of the U.S. in the review area:

Impoundments of jurisdictional waters

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable):³

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Isolated (interstate or intrastate) waters, including isolated wetlands

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	N	X/
			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 7 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

(i	iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentration	ons	of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. (Chai	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i			Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: □ Directly abutting □ Not directly abutting □ Discrete wetland hydrologic connection. Explain: □ Ecological connection. Explain: □ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(i		Char	mical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
((iii)		ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. C		All v	eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: .
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Iden	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	factor judg	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPH and	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
	\boxtimes	

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6274° N, Long112.6479° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and
	Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 4 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:				
	Tributary properties with respect to top of bank (estimate): Average width: 9 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).				
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:				
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %				
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:				
	Surface flow is: Discrete. Characteristics:				
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:				
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community				
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.				
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:				

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

(iv) Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater concentrations of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.	
2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW	
(i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:	
(b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:	
Surface flow is: Pick List Characteristics: .	
Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:	
(c) Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:	
(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.	
 (ii) Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Identify specific pollutants, if known: 	
(iii) Biological Characteristics. Wetland supports (check all that apply): □ Riparian buffer. Characteristics (type, average width): □ Vegetation type/percent cover. Explain: □ Habitat for: □ Federally Listed species. Explain findings: □ Fish/spawn areas. Explain findings: □ Other environmentally-sensitive species. Explain findings: □ Aquatic/wildlife diversity. Explain findings:	
3. Characteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide s	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6267° N, Long112.6484° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	h Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

acres.

Non-regulated waters/wetlands (check if applicable):³

linear feet: width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 4 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 9 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain:
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	Biological Characteristics. Channel supports (check all that apply):
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		Other environmentally-sensitive species. Explain findings:
concentra	ations	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2	CI.	
2.	Cha	racteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Physical Characteristics:
		(a) General Wetland Characteristics:
		Properties: Wetland size: acres
		Wetland type. Explain: .
		Wetland quality. Explain: .
		Project wetlands cross or serve as state boundaries. Explain:
		(b) General Flow Relationship with Non-TNW:
		Flow is: Pick List. Explain:
		Surface flow is: Pick List
		Characteristics: .
		Subsurface flow: Pick List. Explain findings: .
		Dye (or other) test performed: .
		(c) Wetland Adjacency Determination with Non-TNW:
		Directly abutting
		Not directly abutting
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
		Separated by berm/barrier. Explain:
		(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW.
		Project waters are Pick List aerial (straight) miles from TNW.
		Flow is from: Pick List.
		Estimate approximate location of wetland as within the Pick List floodplain.
		Chemical Characteristics:
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		characteristics; etc.). Explain: Identify specific pollutants, if known:
	(iii)	Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
		Vegetation type/percent cover. Explain:
		Habitat for:
		Federally Listed species. Explain findings:
		☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings: .
		☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:
		<u> </u>
3.	Cha	racteristics of all wetlands adjacent to the tributary (if any)
		All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.
		representative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide s	size estimates in review ar	ea:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	ljacent to TNWs:	acres.			

2.	 □ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: □ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
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 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

	or Other (Name & Date):	
Previous	us determination(s). File no. and date of response letter:	
Applic	able/supporting case law: .	
Applic	able/supporting scientific literature: .	
Other i	information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

<u>SЕ</u> (CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6563° N, Long112.6489° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 ☐ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. ☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 1 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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	(iv)	\square	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for:
			 ☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
concentr	ations	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater good sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		vsical Characteristics: General Wetland Characteristics:
		()	Properties:
			Wetland size: acres
			Wetland type. Explain: Wetland quality. Explain:
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List.
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: uracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: utify specific pollutants, if known:
		idei	intry specific polititants, it known.
	(iii)	Bio	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for:
			☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands ad	jacent to TNWs:	acres.	

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	seasonany
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	N IV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps:
		100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: ☐ Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SEC A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
с.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6513° N, Long112.6491° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

acres.

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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	(iv)		logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	ations	of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain:
			Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: cracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: chtify specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide	size estimates in review area:	
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	ljacent to TNWs:	acres.			

2.	 RPWs that flow directly or indirectly into TNWs. □ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: □ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: .
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.636° N, Long112.648° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and
	Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
The rev	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
Γhe	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months)

⁽e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 5 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW^5 : Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:				
	Tributary properties with respect to top of bank (estimate): Average width: 7 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).				
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:				
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %				
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:				
	Surface flow is: Discrete. Characteristics:				
	Subsurface flow: No . Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:				
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community				
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.				
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:				

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	\boxtimes	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side.
			Wetland fringe. Characteristics: . Habitat for:
			Federally Listed species. Explain findings: .
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
concentr	ations	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Phy	vsical Characteristics:
	(-)		General Wetland Characteristics:
		. ,	Properties:
			Wetland size: acres
			Wetland type. Explain:
			Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
			Froject wettailds cross of serve as state boundaries. Explain.
		(b)	General Flow Relationship with Non-TNW:
			Flow is: Pick List. Explain:
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW:
		(0)	Directly abutting
			Not directly abutting
			☐ Discrete wetland hydrologic connection. Explain: .
			Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW
			Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List . Estimate approximate location of wetland as within the Pick List floodplain.
			25 Minute approximate rocation of westand as within the 1 Kit 2000 noodplain.
	(ii)		emical Characteristics:
		Clia	aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:
		Ider	ntify specific pollutants, if known:
	(iii	Riol	logical Characteristics. Wetland supports (check all that apply):
	(111)		Riparian buffer. Characteristics (type, average width):
			Vegetation type/percent cover. Explain:
			Habitat for:
			Federally Listed species. Explain findings:
			☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings:
3.	Che	ract	eristics of all wetlands adjacent to the tributary (if any)
٥.	CII		wetland(s) being considered in the cumulative analysis: Pick List
			proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Adja	acent Wetlands.	Check all that apply	and provide size estimates in review are:	a:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands adj	acent to TNWs:	acres.		

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: .
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft).
	Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	Impoundments of jurisdictional waters. As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	PLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	l l	which are or could be used by interstate or foreign travelers for recreational or other purposes. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce. Which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Iden	tify water body and summarize rationale supporting determination:
		ide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR are (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a find	ide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
A.	and I	ORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
Α.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.631° N, Long112.6482° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
B.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

b. Identify (estimate) size of waters of the U.S. in the review area:

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	N	X/
			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 4 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	ations	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain:
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List . Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide s	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: .
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
Identify water body and summarize rationale supporting determination:
Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
TION IV: DATA SOURCES.
UPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
Α.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6316° N, Long112.649° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			13	1	v	1

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 4 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	Biological Characteristics. Channel supports (check all that apply):
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	ations	of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
	~	
2.	Cha	racteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Physical Characteristics:
		(a) General Wetland Characteristics:
		Properties: Wetland size: acres
		Wetland type. Explain: .
		Wetland quality. Explain: .
		Project wetlands cross or serve as state boundaries. Explain: .
		(b) General Flow Relationship with Non-TNW:
		Flow is: Pick List. Explain:
		Surface flow is: Pick List
		Characteristics: .
		Subsurface flow: Pick List. Explain findings: .
		Dye (or other) test performed: .
		(c) Wetland Adjacency Determination with Non-TNW:
		Directly abutting
		□ Not directly abutting
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
		Separated by berm/barrier. Explain: .
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are <u>Pick List</u> river miles from TNW.
		Project waters are Pick List aerial (straight) miles from TNW.
		Flow is from: Pick List.
		Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Chemical Characteristics:
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		characteristics; etc.). Explain: Identify specific pollutants, if known:
		identity specific pollutants, it known:
	(iii)	Biological Characteristics. Wetland supports (check all that apply):
		Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		Other environmentally-sensitive species. Explain findings:
		Aquatic/wildlife diversity. Explain findings: .
3.	Cha	racteristics of all wetlands adjacent to the tributary (if any)
		All wetland(s) being considered in the cumulative analysis: Pick List
		Approximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Adja	acent Wetlands.	Check all that apply	and provide size estimates in review are:	a:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands adj	acent to TNWs:	acres.		

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	entify water body and summarize rationale supporting determination:
	ovide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.	ON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	ovide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ctors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional dgment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	ovide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such inding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
<u>SE</u>	ON IV: DATA SOURCES.
A.	PPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked d requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

<u>SЕ</u>	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
с.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6578° N, Long112.6502° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	TA.	T	X	7
			13	1	v	1

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 8 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 2 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 33 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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(ir		Biological Characteristics. Channel supports (check all that apply): ☐ Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. ☐ Wetland fringe. Characteristics: ☐ Habitat for: ☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater	
concentratio	ns c	of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.	
2. C	hara	acteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW	
(i)		Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:	
	((b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:	
		Surface flow is: Pick List Characteristics:	
		Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:	
	(Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:	
	(Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.	
(ii	(Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Identify specific pollutants, if known:	
(i	iii) I [] [Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:	
3. C	A	acteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	apply and provide si	ize estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	seasonany.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale
	indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	Impoundments of jurisdictional waters. As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:					
	Identify water body and summarize rationale supporting determination:					
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.				
F.	NOI	N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):				
	facto	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.				
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.				
SEC	<u>CTIO</u>	NIV: DATA SOURCES.				
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.				
		Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: ☐ USGS NHD data. ☐ USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)				

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date):	
Previous determination(s). File no. and date of response let	tter: .
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

<u>SЕ</u> (CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
с.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6387° N, Long112.65° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
The	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

acres.

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

 $^{^{1}}$ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:					
	Tributary properties with respect to top of bank (estimate): Average width: 6 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).					
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:					
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %					
,	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation nches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days Project Area. Other information on duration and volume:					
	Surface flow is: Discrete. Characteristics:					
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:					
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community					
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:					
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:					

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:
concentra	tions	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater and shelter for mammals, birds, and reptiles, than surrounding upland areas.
			eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
			sical Characteristics:
	(i)		General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics: .
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	mical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

l.	TNWs and A	djacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	■ Wetlands	adjacent to TNWs:	acres.	

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Iden	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	factor judg	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPH and	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
		Photographs: Marial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
с.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.634° N, Long112.6501° W.
	Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.
² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally"

⁽e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentrat	tions	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	mical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All v	eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide s	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISC	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

Identify water body and summarize rationale supporting determination:				
the				
onal				
such				
ked				

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

<u>SЕ</u> (CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6296° N, Long112.6518° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 ☐ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. ☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW^5 : Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics tidal gauges other (list):
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentrat	tions	of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	weristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and A	djacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	■ Wetlands a	adjacent to TNWs:	acres.	

2.	RPWs that flow directly or indirectly into TNWs. ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are
	jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
Id	lentify water body and summarize rationale supporting determination:
Pr	rovide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F. No	ON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
fac	ovide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR ctors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional dgment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	rovide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such finding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
<u>SECTI</u>	ION IV: DATA SOURCES.
A. SU	PPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked de requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps.
A. SUI	PPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6355° N, Long112.6524° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
Α.	RHA SECTION IN DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: ☐ Natural ☐ Artificial (man-made). Explain: ☐ Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 6 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. ⁷ Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. https://doi.org/10.1001/j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

	(iv)	Bio	logical Characteristics. Channel supports (check all that apply):
		\boxtimes	Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side.
			Wetland fringe. Characteristics: .
		\boxtimes	Habitat for:
			Federally Listed species. Explain findings:
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentr	ation	s of f	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	aract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(4)	-	
	(i)	_	vsical Characteristics:
		(a)	General Wetland Characteristics:
			Properties:
			Wetland size: acres
			Wetland type. Explain:
			Wetland quality. Explain:
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Polationship with Non TNW:
		(0)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			How is. Fire Elst. Explain.
			Surface flow is: Pick List
			Characteristics: .
			Characteristics.
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed:
			_ , , , , , , , , , , , , , , , , , , ,
		(c)	Wetland Adjacency Determination with Non-TNW:
			Directly abutting
			☐ Not directly abutting
			☐ Discrete wetland hydrologic connection. Explain: .
			Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW
			Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List.
			Estimate approximate location of wetland as within the Pick List floodplain.
	(#)	Ch	emical Characteristics:
	(11)		racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		CIIa	characteristics; etc.). Explain:
		Ide	ntify specific pollutants, if known:
		Iuci	arry specific politicants, it known.
	(iii) Rio	logical Characteristics. Wetland supports (check all that apply):
	(Riparian buffer. Characteristics (type, average width):
		Ħ	Vegetation type/percent cover. Explain: .
		Ħ	Habitat for:
		_	Federally Listed species. Explain findings: .
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings:
3.	Cha		eristics of all wetlands adjacent to the tributary (if any)
			wetland(s) being considered in the cumulative analysis: Pick List
		App	proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide s	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: .
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	Impoundments of jurisdictional waters. As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

<u> SE (</u> А.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
с.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6475° N, Long112.654° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and
	Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
revi	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	N	X/
			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 4 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is:					
	Tributary properties with respect to top of bank (estimate): Average width: 5 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).					
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:					
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %					
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days Project Area. Other information on duration and volume:					
	Surface flow is: Discrete. Characteristics: .					
	Subsurface flow: No . Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:					
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. ⁷ Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community					
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.					
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. atify specific pollutants, if known:					

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

	(iv)	Biological Characteristics. Channel supports (check all that apply):
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		Other environmentally-sensitive species. Explain findings:
concentra	ations	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2	Cho	proceedings of westlands adjacent to non TNW that flavy directly an indirectly into TNW
2.	Clia	aracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Physical Characteristics:
		(a) General Wetland Characteristics: Properties:
		Wetland size: acres
		Wetland type. Explain: .
		Wetland quality. Explain: .
		Project wetlands cross or serve as state boundaries. Explain:
		(b) General Flow Relationship with Non-TNW:
		Flow is: Pick List . Explain:
		Surface flow is: Pick List
		Characteristics: .
		Subsurface flow: Pick List. Explain findings: .
		Dye (or other) test performed:
		(c) Wetland Adjacency Determination with Non-TNW:
		☐ Directly abutting
		□ Not directly abutting
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
		Separated by berm/barrier. Explain: .
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are <u>Pick List</u> river miles from TNW.
		Project waters are Pick List aerial (straight) miles from TNW.
		Flow is from: Pick List.
		Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Chemical Characteristics:
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		characteristics; etc.). Explain: Identify specific pollutants, if known:
	(111)	Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
		Vegetation type/percent cover. Explain:
		Habitat for:
		Federally Listed species. Explain findings:
		☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
		☐ Aquatic/wildlife diversity. Explain findings:
_	~-	
3.	Cha	aracteristics of all wetlands adjacent to the tributary (if any)
		All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.
		- Approximately () delete in total are coming considered in the cumulative untrysts.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide s	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	 RPWs that flow directly or indirectly into TNWs. ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are
	jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
<u>SE</u>	CTIO	NIV: DATA SOURCES.
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
	_	

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6307° N, Long112.6525° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ware Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

c. Limits (boundaries) of jurisdiction based on: Pick List

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 4 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:
concentra	tions	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Phy	sical Characteristics:
			General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List . Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	mical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and A	Adjacent Wetlands.	Check all that	apply and provide size	estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	■ Wetlands	adjacent to TNWs:	acres.		

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Scasonary.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:				
	Identify water body and summarize rationale supporting determination:					
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.				
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):				
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.				
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.				
SEC	CTIO	NIV: DATA SOURCES.				
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.				
		100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)				

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6283° N, Long112.6543° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) İnto which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
The	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
Γhe	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 5 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	ations	s of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain:
			Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: cracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: chtify specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide s	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	RPWs that flow directly or indirectly into TNWs. ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are
	jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date):	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6247° N, Long112.6546° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	are Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the new area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands:

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW^5 : Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 4 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

(iv) Biological Characteristics. Channel supports (check all that apply): □ Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet □ Wetland fringe. Characteristics: □ Habitat for: □ Federally Listed species. Explain findings: □ Fish/spawn areas. Explain findings: □ Other environmentally-sensitive species. Explain findings: □ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors	
concentrations of food sources and shelter for mammals, birds, and reptiles, than surrounding uplar	
2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly in	to TNW
(i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:	
(b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:	
Surface flow is: Pick List Characteristics:	
Subsurface flow: Pick List . Explain findings: Dye (or other) test performed: .	
(c) Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:	
(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.	
 (ii) Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; vecharacteristics; etc.). Explain: Identify specific pollutants, if known: . 	water quality; general watershed
(iii) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:	
3. Characteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analy	⁄sis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands ad	ljacent to TNWs:	acres.	

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	seasonany
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	N IV: DATA SOURCES.
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
	\boxtimes	Priotographs: 🔀 Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6367° N, Long112.654° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 ☐ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. ☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

b. Identify (estimate) size of waters of the U.S. in the review area:

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	TA.	T	X	7
			13	1	v	1

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is:					
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).					
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:					
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %					
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:					
	Surface flow is: Discrete. Characteristics:					
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:					
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. ⁷ Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community					
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.					
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. https://doi.org/10.1001/j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.					

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

	(iv)	\square	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:
concentra	ations	s of fe	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	-	General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: artify specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that a	apply and provide siz	ze estimates in review area:	
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
10/	OI ATEN HNITEDSTATE OD INTDA STATELWATEDS INCLUDING 1801 ATEN WETLANDS THE LISE
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6387° N, Long112.6541° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

b. Identify (estimate) size of waters of the U.S. in the review area:

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 2 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	Biological Characteristics. Channel supports (check all that apply):
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		Other environmentally-sensitive species. Explain findings:
concentra	ations	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2	Cha	weekenisties of weeken de a die oort to week TNNN sheet floor die ooks on in die ooks in to TNNN
2.	Cna	racteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Physical Characteristics:
		(a) General Wetland Characteristics: Proportion:
		Properties: Wetland size: acres
		Wetland type. Explain: .
		Wetland quality. Explain: .
		Project wetlands cross or serve as state boundaries. Explain:
		(b) General Flow Relationship with Non-TNW:
		Flow is: Pick List . Explain: .
		Surface flow is: Pick List
		Characteristics: .
		Subsurface flow: Pick List. Explain findings: .
		Dye (or other) test performed: .
		(c) Wetland Adjacency Determination with Non-TNW:
		☐ Directly abutting
		□ Not directly abutting
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
		Separated by berm/barrier. Explain:
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are <u>Pick List</u> river miles from TNW.
		Project waters are Pick List aerial (straight) miles from TNW.
		Flow is from: Pick List.
		Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Chemical Characteristics:
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		characteristics; etc.). Explain: Identify specific pollutants, if known:
	(***)	
	(iii)	Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
		Vegetation type/percent cover. Explain:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:
	_	<u> </u>
3.	Cha	racteristics of all wetlands adjacent to the tributary (if any)
		All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.
		reproximately () acros in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	apply and provide	size estimates in review area:	
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands ad	ljacent to TNWs:	acres.			

2.	 RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	seasonary.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date):	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SEC A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6323° N, Long112.6544° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a
D.	different JD form. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
B.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	N	X/
			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 7 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:
concentra	ations	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Phy	sical Characteristics:
		(a)	General Wetland Characteristics: Properties:
			Wetland size: acres
			Wetland type. Explain: .
			Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Flow is. Tek List. Explain.
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW:
			☐ Directly abutting ☐ Not directly abutting
			Discrete wetland hydrologic connection. Explain:
			Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW
			Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List .
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Che	emical Characteristics:
	,		racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		Iden	characteristics; etc.). Explain: tify specific pollutants, if known:
		Iden	tary specific politicants, it known.
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
		\exists	Vegetation type/percent cover. Explain:
			Habitat for:
			Federally Listed species. Explain findings: Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings:
3.	Cha	racte	eristics of all wetlands adjacent to the tributary (if any)
		All	wetland(s) being considered in the cumulative analysis: Pick List
		App	proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and A	djacent Wetlands.	Check all that a	pply and provide	e size estimates in review are	a:
	TNWs:	linear feet	width (ft), Or,	acres.		
	■ Wetlands a	adjacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
DE	CRADATION OR DESTRUCTION OF WHICH COLL DIAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY): 10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SEC	CTION I: BACKGROUND INFORMATION
Ā.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):
B.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.645° N, Long112.6561° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
The revi	we area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Non-regulated waters/wetlands (check if applicable):³

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 4 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

(i	 Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentration	ons of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. C	haracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i	Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
	(b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
	Surface flow is: Pick List Characteristics:
	Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
	(c) Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
	(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(i	Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Identify specific pollutants, if known:
(1	iii) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. C	haracteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	seasonany
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
<u>SE</u>	CTIO	N IV: DATA SOURCES.
A.	and	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SEC	CTION I: BACKGROUND INFORMATION
Α.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6339° N, Long112.6563° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 ☐ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. ☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	we are an "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
B.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	1. Waters of the U.S. within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required 1. Waters of the U.S.
	a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands:

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:					
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).					
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:					
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %					
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:					
	Surface flow is: Discrete. Characteristics:					
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:					
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community					
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.					
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:					

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		logical Characteristics. Channel supports (check all that apply):
			Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
			Habitat for:
			Federally Listed species. Explain findings:
			Fish/spawn areas. Explain findings:
			☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	ations	s of f	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
	~		
2.	Cha	aract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		vsical Characteristics:
		(a)	General Wetland Characteristics:
			Properties: Wetland size: acres
			Wetland type. Explain: .
			Wetland quality. Explain:
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW:
		. ,	Flow is: Pick List. Explain:
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed: .
		(c)	Wetland Adjacency Determination with Non-TNW:
			Directly abutting
			Not directly abutting
			☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		<i>(</i> 1)	
		(a)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List.
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)		emical Characteristics:
		Cha	aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		T.J.,	characteristics; etc.). Explain:
		Idei	ntify specific pollutants, if known:
	(iii)	Bio!	logical Characteristics. Wetland supports (check all that apply):
		H	Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain:
		H	Habitat for:
			Federally Listed species. Explain findings: .
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings: .
3.	Cha		eristics of all wetlands adjacent to the tributary (if any)
			wetland(s) being considered in the cumulative analysis: Pick List
		App	proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide s	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:			
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows			
	seasonally: .			
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .			
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.			
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.			
	Identify type(s) of waters:			
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:			
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:			
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.			
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.			
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.			
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.			
	Provide estimates for jurisdictional wetlands in the review area: acres.			
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).			
DE	ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY): 10			

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:			
	Identify water body and summarize rationale supporting determination:			
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.		
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):		
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.		
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.		
SEC	CTIO	NIV: DATA SOURCES.		
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.		

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
A.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6375° N, Long112.6561° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
SE A.	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters

c. Limits (boundaries) of jurisdiction based on: **Pick List** Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

2. Non-regulated waters/ wettailus (check ii applicable).

b. Identify (estimate) size of waters of the U.S. in the review area:

linear feet:

Isolated (interstate or intrastate) waters, including isolated wetlands

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles Drainage area: 3 square miles Average annual rainfall: 7 inches Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 6 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

(iv) Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater concentrations of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
(b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
Surface flow is: Pick List Characteristics:
Subsurface flow: Pick List . Explain findings: Dye (or other) test performed:
(c) Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(ii) Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Identify specific pollutants, if known:
(iii) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. Characteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands a	djacent to TNWs:	acres.	

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
TC/	OI ATED UNITEDSTATE OD INTDA STATELWATEDS INCLUDING 1201 ATED WETLANDS THE LISE
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:			
Identify water body and summarize rationale supporting determination:			
Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.			
NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):			
Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.			
Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.			
TION IV: DATA SOURCES.			
UPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.			

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6399° N, Long112.6566° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	Bio	logical Characteristics. Channel supports (check all that apply):
		\boxtimes	Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side.
			Wetland fringe. Characteristics: .
		\boxtimes	Habitat for:
			Federally Listed species. Explain findings:
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentr	ation	s of f	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	aract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(8)	-	
	(i)	_	vsical Characteristics:
		(a)	General Wetland Characteristics:
			Properties:
			Wetland size: acres Wetland type. Explain: .
			Wetland quality. Explain: .
			Project wetlands cross or serve as state boundaries. Explain:
			Troject wettailds cross of serve as state boundaries. Explain.
		(h)	General Flow Relationship with Non-TNW:
		(0)	Flow is: Pick List . Explain:
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW:
			Directly abutting
			Not directly abutting
			Discrete wetland hydrologic connection. Explain:
			Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		(4)	Proximity (Relationship) to TNW
		(u)	Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List.
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Che	emical Characteristics:
		Cha	racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
			characteristics; etc.). Explain: .
		Idei	ntify specific pollutants, if known:
	(iii)) Bio	logical Characteristics. Wetland supports (check all that apply):
		님	Riparian buffer. Characteristics (type, average width):
		님	Vegetation type/percent cover. Explain:
		Ш	Habitat for:
			Federally Listed species. Explain findings: Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings:
3.	Ch	aract	eristics of all wetlands adjacent to the tributary (if any)
٥.	J116		wetland(s) being considered in the cumulative analysis: Pick List
			proximately () acres in total are being considered in the cumulative analysis.
		11	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands a	djacent to TNWs:	acres.	

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Scasonary.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such dding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
<u>SE</u>	CTIO	N IV: DATA SOURCES.
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6346° N, Long112.6563° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

acres.

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:				
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).				
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:				
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %				
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:				
	Surface flow is: Discrete. Characteristics:				
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:				
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community				
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:				
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:				

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(i	v)	Biol	ogical Characteristics. Channel supports (check all that apply):
			\boxtimes	Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side.
				Wetland fringe. Characteristics: .
			\boxtimes	Habitat for:
				Federally Listed species. Explain findings:
				Fish/spawn areas. Explain findings:
				Other environmentally-sensitive species. Explain findings:
				Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
conce	entratio	ons	of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
	2. C	ha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(*	`	ъ	
	(i	.)	_	sical Characteristics:
			(a)	General Wetland Characteristics:
				Properties:
				Wetland size: acres
				Wetland type. Explain: Wetland quality, Explain:
				Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
				rioject wetiands cross of serve as state boundaries. Exprain.
			(h)	General Flow Relationship with Non-TNW:
			(0)	Flow is: Pick List . Explain:
				210 H 20 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
				Surface flow is: Pick List
				Characteristics: .
				Subsurface flow: Pick List. Explain findings: .
				Dye (or other) test performed:
			(c)	Wetland Adjacency Determination with Non-TNW:
				☐ Directly abutting
				Not directly abutting
				Discrete wetland hydrologic connection. Explain:
				Ecological connection. Explain:
				Separated by berm/barrier. Explain: .
			(4)	Proximity (Palationship) to TNW
			(u)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW.
				Project waters are Pick List aerial (straight) miles from TNW.
				Flow is from: Pick List.
				Estimate approximate location of wetland as within the Pick List floodplain.
				250 mare upproximate room or weather as writing the 2 tot 250 mosephilin
	(i	i)	Che	emical Characteristics:
			Cha	racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
				characteristics; etc.). Explain: .
			Iden	ntify specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply):
			Ц	Riparian buffer. Characteristics (type, average width):
			\sqcup	Vegetation type/percent cover. Explain: .
			Ш	Habitat for:
				Federally Listed species. Explain findings:
				Fish/spawn areas. Explain findings:
				Other environmentally-sensitive species. Explain findings:
				Aquatic/wildlife diversity. Explain findings:
	3. C	ho.	rant	eristics of all wetlands adjacent to the tributary (if any)
,	<i>J</i> . (ııd		wetland(s) being considered in the cumulative analysis: Pick List
				proximately () acres in total are being considered in the cumulative analysis.
			, th	/ ucres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Adja	acent Wetlands.	Check all that apply	and provide size	estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	■ Wetlands adj	acent to TNWs:	acres.		

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
JSC	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:					
Identify water body and summarize rationale supporting determination:					
Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.					
NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):					
Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.					
Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.					
TION IV: DATA SOURCES.					
UPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.					

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
Α.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
B.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6244° N, Long112.6566° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam.
	Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

Impoundments of jurisdictional waters

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:						
	Tributary properties with respect to top of bank (estimate): Average width: 5 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).						
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:						
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %						
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:						
	Surface flow is: Discrete. Characteristics:						
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:						
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment sorting abrupt change in plant community						
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.						
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:						

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

(i·		R N N N N N N N N N	cical Characteristics. Channel supports (check all that apply): Expansion corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Vetland fringe. Characteristics: Iabitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentratio	ons (d sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. C	har	acteri	istics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i)		(a) <u>C</u>	cal Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
	(General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			curface flow is: Pick List Characteristics:
		S	bubsurface flow: Pick List. Explain findings: Dye (or other) test performed:
	(Vetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
	(P P F	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Plow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(ii	(Chara c	ical Characteristics: cterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed haracteristics; etc.). Explain: fy specific pollutants, if known:
(i	iii)] 	R V H C	cical Characteristics. Wetland supports (check all that apply): Liparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Labitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. C		All we	istics of all wetlands adjacent to the tributary (if any) etland(s) being considered in the cumulative analysis: Pick List eximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	ljacent Wetlands.	Check all that a	apply and provide siz	e estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:			
	Identify water body and summarize rationale supporting determination:				
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.			
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):			
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.			
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.			
SEC	<u>CTIO</u>	NIV: DATA SOURCES.			
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.			

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6275° N, Long112.6574° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

b. Identify (estimate) size of waters of the U.S. in the review area:

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

TINIXX
TINIXX/

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 5 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Cobbles Gravel Bedrock Other. Explain: Muck Concrete Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain:
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

 Wetland fringe. Characteristics: . Habitat for: □ Federally Listed species. Explain fin □ Fish/spawn areas. Explain findings: □ Other environmentally-sensitive spec 	average width): xeroriparian, 0-5 feet wide on either side. lings:
concentrations of food sources and shelter for mammals, bird	
2. Characteristics of wetlands adjacent to non-TN	W that flow directly or indirectly into TNW
(i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state be	oundaries. Explain:
(b) <u>General Flow Relationship with Non-TN</u> Flow is: Pick List . Explain:	<u>W</u> :
Surface flow is: Pick List Characteristics:	
Subsurface flow: Pick List. Explain find Dye (or other) test performed:	lings:
(c) Wetland Adjacency Determination with Directly abutting Not directly abutting Discrete wetland hydrologic com Ecological connection. Explain: Separated by berm/barrier. Expl.	nection. Explain:
(d) Proximity (Relationship) to TNW Project wetlands are Pick List river mile Project waters are Pick List aerial (straightful flow) is from: Pick List. Estimate approximate location of wetland	ght) miles from TNW.
(ii) Chemical Characteristics: Characterize wetland system (e.g., water color characteristics; etc.). Explain: Identify specific pollutants, if known:	is clear, brown, oil film on surface; water quality; general watershed
(iii) Biological Characteristics. Wetland supporting Riparian buffer. Characteristics (type, as Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain find: Fish/spawn areas. Explain findings: Other environmentally-sensitive specting Aquatic/wildlife diversity. Explain findings.	erage width): . dings: . tes. Explain findings:
3. Characteristics of all wetlands adjacent to the translation All wetland(s) being considered in the cumula Approximately () acres in total are being considered in the cumula are being cons	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Adj	acent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands ad	acent to TNWs:	acres.	

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
DE	CRADATION OR DESTRUCTION OF WHICH COLL DIAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

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 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
A.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6381° N, Long112.6595° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Impoundments of jurisdictional waters

Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW^5 : Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is:					
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).					
	Primary tributary substrate composition (check all that apply): Silts Sands Cobbles Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck					
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %					
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:					
	Surface flow is: Discrete. Characteristics: .					
	Subsurface flow: No . Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:					
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. ⁷ Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community					
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.					
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. atify specific pollutants, if known:					

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

	(iv)		logical Characteristics. Channel supports (check all that apply):
			Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
			Habitat for:
			Federally Listed species. Explain findings:
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
concentra	ations	s of f	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2	Cha		within a found on the alice and the many TMNN that flowed in a fine allowed to the TMNN
2.	Cna	aract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		rsical Characteristics:
		(a)	General Wetland Characteristics: Perperties:
			Properties: Wetland size: acres
			Wetland type. Explain: .
			Wetland quality. Explain: .
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW:
			Flow is: Pick List . Explain:
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed: .
		(c)	Wetland Adjacency Determination with Non-TNW:
			Directly abutting
			☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain:
			Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		(d)	Proximity (Polationship) to TNW
		(u)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List.
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)		emical Characteristics:
		Cha	racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		Idei	characteristics; etc.). Explain: tify specific pollutants, if known: .
	(***)) Dia	logical Characteristics. Wetland supports (check all that apply):
	(III)		Riparian buffer. Characteristics (type, average width):
			Vegetation type/percent cover. Explain:
			Habitat for:
			Federally Listed species. Explain findings:
			☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings:
2	CI.		
3.	Cha		eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List
			proximately () acres in total are being considered in the cumulative analysis.
		11	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	ljacent Wetlands.	Check all that a	apply and provide siz	e estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
TO	
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY): 10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:				
	Ider	ntify water body and summarize rationale supporting determination:			
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.			
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):			
	facto	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.			
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.			
SEC	<u>CTIO</u>	NIV: DATA SOURCES.			
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.			

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

A.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015				
B.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737				
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6517° N, Long112.6599° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.				
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):				
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.				
	There Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:				
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.				

There Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

SECTION I: BACKGROUND INFORMATION

VV	aters of the U.S.				
a.	Indicate presence of waters of U.S. in review area (check all that apply): 1				
	TNWs, including territorial seas				
	Wetlands adjacent to TNWs				
	Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs				
	Non-RPWs that flow directly or indirectly into TNWs				
	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs				
	Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs				
	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs				
	Impoundments of jurisdictional waters				
	Isolated (interstate or intrastate) waters, including isolated wetlands				
b.	Identify (estimate) size of waters of the U.S. in the review area:				
	Non-wetland waters: linear feet: width (ft) and/or 0 acres.				
	Wetlands: acres.				

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 2 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	Biological Characteristics. Channel supports (check all that apply):	
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:	
		Habitat for:	
		Federally Listed species. Explain findings:	
		Fish/spawn areas. Explain findings:	
		Other environmentally-sensitive species. Explain findings:	
concentra	ations	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater s of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.	
2	Cha	and desirable of modern de adicionate to many TNNNV also a flore discoultre on in discoultre into TNNNV	
2.	Cna	aracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW	
	(i)	Physical Characteristics:	
		(a) General Wetland Characteristics: Proporties:	
		Properties: Wetland size: acres	
		Wetland type. Explain: .	
		Wetland quality. Explain: .	
		Project wetlands cross or serve as state boundaries. Explain:	
		(b) General Flow Relationship with Non-TNW:	
		Flow is: Pick List . Explain:	
		Surface flow is: Pick List	
		Characteristics: .	
		Subsurface flow: Pick List. Explain findings: .	
		Dye (or other) test performed:	
		(c) Wetland Adjacency Determination with Non-TNW:	
		Directly abutting	
		□ Not directly abutting	
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:	
		Separated by berm/barrier. Explain:	
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are Pick List river miles from TNW.	
		Project waters are Pick List aerial (straight) miles from TNW.	
		Flow is from: Pick List.	
		Estimate approximate location of wetland as within the Pick List floodplain.	
	(ii)	Chemical Characteristics:	
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed	
		characteristics; etc.). Explain: Identify specific pollutants, if known:	
	(iii)) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):	
		Vegetation type/percent cover. Explain:	
		Habitat for:	
		Federally Listed species. Explain findings:	
		Fish/spawn areas. Explain findings:	
		☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:	
3.	Cha	aracteristics of all wetlands adjacent to the tributary (if any)	
		All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.	
		Approximately () acres in total are being considered in the cumulative aliarysis.	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	djacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands a	djacent to TNWs:	acres.	

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISC	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
		National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
с.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.639° N, Long112.6638° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and
	Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
SE A.	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW^5 : Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 5 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	ations	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain:
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	ljacent Wetlands.	Check all that a	apply and provide size	e estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
TO	OI ATEN HNITEDOTATE OD INTDA CTATEJ WATEDO INCLIINING ICOLATEN WETH ANDOTHE LIGE
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	ntify water body and summarize rationale supporting determination:
	vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.	N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	vide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	NIV: DATA SOURCES.
	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where check requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
с.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6289° N, Long112.6596° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and
	Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 1 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 4 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW^5 : Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 4 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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	(iv)	\square	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for:
			☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings: .
concentr	ations	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
			sical Characteristics:
	(1)		General Wetland Characteristics:
			Properties:
			Wetland size: acres Wetland type. Explain: .
			Wetland quality. Explain: .
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List . Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Che	emical Characteristics:
	(11)		racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		Ider	characteristics; etc.). Explain:
	(iii`	Biol	logical Characteristics. Wetland supports (check all that apply):
	,		Riparian buffer. Characteristics (type, average width):
		\mathbb{H}	Vegetation type/percent cover. Explain: Habitat for:
			Federally Listed species. Explain findings: .
			Fish/spawn areas. Explain findings:
			☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:
3.	Cha		eristics of all wetlands adjacent to the tributary (if any)
			wetland(s) being considered in the cumulative analysis: Pick List proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide	size estimates in review a	rea:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	ljacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SE(CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SEC A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015					
B.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737					
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6374° N. Long112.6604° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.					
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):					
	SECTION II: SUMMARY OF FINDINGS A. RHA SECTION 10 DETERMINATION OF JURISDICTION.					
	There Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:					
В. (B. CWA SECTION 404 DETERMINATION OF JURISDICTION.					

There Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1.

Waters of the U.S.
a. Indicate presence of waters of U.S. in review area (check all that apply): ¹
TNWs, including territorial seas
Wetlands adjacent to TNWs
Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs
Non-RPWs that flow directly or indirectly into TNWs
Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
Impoundments of jurisdictional waters
Isolated (interstate or intrastate) waters, including isolated wetlands
b. Identify (estimate) size of waters of the U.S. in the review area:
Non-wetland waters: linear feet: width (ft) and/or 0 acres.
Wetlands: acres.
c. Limits (boundaries) of jurisdiction based on: Pick List
Elevation of established OHWM (if known): .

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:				
	Tributary properties with respect to top of bank (estimate): Average width: 4 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).				
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck				
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %				
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:				
	Surface flow is: Discrete. Characteristics:				
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:				
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community				
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:				
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:				

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		logical Characteristics. Channel supports (check all that apply):
			Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		\boxtimes	Habitat for:
			Federally Listed species. Explain findings:
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
concentra	ations	s of f	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2	Cha	4	oui-ties of mother deadle and TNIXI that flow discoult on indicately into TNIXI
2.	Cna	агасі	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		rsical Characteristics:
		(a)	General Wetland Characteristics: Perperties:
			Properties: Wetland size: acres
			Wetland type. Explain: .
			Wetland quality. Explain: .
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW:
			Flow is: Pick List . Explain:
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed: .
		(c)	Wetland Adjacency Determination with Non-TNW:
			Directly abutting
			☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain:
			Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		(d)	Proximity (Polationship) to TNW
		(u)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List.
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)		emical Characteristics:
		Cha	racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		Idei	characteristics; etc.). Explain: tify specific pollutants, if known: .
	(:::)) Dia	logical Characteristics. Wetland supports (check all that apply):
	(III)		Riparian buffer. Characteristics (type, average width):
		\Box	Vegetation type/percent cover. Explain:
			Habitat for:
			Federally Listed species. Explain findings:
			☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings:
2	CI.		
3.	Cha		eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List
			proximately () acres in total are being considered in the cumulative analysis.
		11	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide s	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
15/	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRICTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:					
	Identify water body and summarize rationale supporting determination:						
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.					
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):					
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.					
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.					
SEC	CTIO	NIV: DATA SOURCES.					
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.					

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

<u>SЕ</u> (CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
с.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6407° N, Long112.6539° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 5 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:
concentrat	tions	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	weristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

TNWs and A	djacent Wetlands.	Check all that apply	y and provide size estimates in review area:
TNWs:	linear feet	width (ft), Or,	acres.
Wetlands	adjacent to TNWs:	acres.	

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	GRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Iden	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	factor judg	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPH and	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
	\bowtie	Photographs: 🖂 Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6353° N, Long112.6587° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
revi	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 1 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 5 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentrat	tions	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	mical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that a	apply and provide siz	ze estimates in review area:	
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	 □ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: □ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	N IV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date):	
Previous determination(s). File no. and date of response le	tter: .
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

<u>SЕ</u> (CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6552° N, Long112.6624° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 ☐ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. ☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

acres.

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	\square	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:
concentra	tions	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: tracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

l.	TNWs and A	djacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	■ Wetlands a	adjacent to TNWs:	acres.	

2.	 RPWs that flow directly or indirectly into TNWs. ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: .
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
A.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6379° N, Long112.6622° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and
	Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	are Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

$\mbox{\bf b.}\;\;\mbox{Identify}\;\mbox{(estimate)}\;\mbox{size}\;\mbox{of waters}\;\mbox{of}\;\mbox{the}\;\mbox{U.S.}\;\mbox{in}\;\mbox{the}\;\mbox{review}\;\mbox{area:}\;$

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Impoundments of jurisdictional waters

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: ☐ Natural ☐ Artificial (man-made). Explain: ☐ Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 4 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. ⁷ Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. https://doi.org/10.1001/j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

	(iv)	Biological Characteristics. Channel supports (check all that apply):
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		Other environmentally-sensitive species. Explain findings:
concentra	ations	
2	Cha	
2.	Cna	aracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Physical Characteristics:
		(a) General Wetland Characteristics: Proportion:
		Properties: Wetland size: acres
		Wetland type. Explain: .
		Wetland quality. Explain: .
		Project wetlands cross or serve as state boundaries. Explain:
		(b) General Flow Relationship with Non-TNW:
		Flow is: Pick List . Explain:
		Surface flow is: Pick List
		Characteristics: .
		Subsurface flow: Pick List. Explain findings: .
		Dye (or other) test performed:
		(c) Wetland Adjacency Determination with Non-TNW:
		☐ Directly abutting
		□ Not directly abutting
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
		Separated by berm/barrier. Explain:
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are Pick List river miles from TNW.
		Project waters are Pick List aerial (straight) miles from TNW.
		Flow is from: Pick List.
		Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Chemical Characteristics:
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		characteristics; etc.). Explain: Identify specific pollutants, if known:
	(iii)	Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
		Vegetation type/percent cover. Explain:
		Habitat for:
		Federally Listed species. Explain findings:
		☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
		☐ Aquatic/wildlife diversity. Explain findings:
_		
3.	Cha	aracteristics of all wetlands adjacent to the tributary (if any)
		All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.
		- Approximately () delete in total are come considered in the confidence analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide s	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	GRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	N IV: DATA SOURCES.
A.	and	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
с.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6383° N, Long112.6627° W.
	Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: **Pick List** Elevation of established OHWM (if known):

acres.

Boxes checked below shall be supported by completing the appropriate sections in Section III below.

Wetlands:

^{2.} Non-regulated waters/wetlands (check if applicable):³

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g. typically 3 months)

⁽e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	N	X/
			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 5 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: bed and banks the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	\square	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	ations	of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain:
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: https://example.com/racteristics/racteris
	(iii)	Bio	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that a	apply and provide siz	ze estimates in review area:	
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	Impoundments of jurisdictional waters. As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:				
	Idei	ntify water body and summarize rationale supporting determination:			
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.			
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):			
	fact	wide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.			
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.			
SEC	CTIO	N IV: DATA SOURCES.			
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.			

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION
Α.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6271° N, Long112.663° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	we area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	are Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

b. Identify (estimate) size of waters of the U.S. in the review area:

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:						
	Tributary properties with respect to top of bank (estimate): Average width: 5 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).						
	Primary tributary substrate composition (check all that apply): Silts Sands Cobbles Gravel Bedrock Other. Explain: Muck Concrete Muck						
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %						
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:						
	Surface flow is: Discrete. Characteristics:						
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:						
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting abrupt change in plant community						
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:						
Cha	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:						

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	Bio	logical Characteristics. Channel supports (check all that apply):
		\boxtimes	Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side.
			Wetland fringe. Characteristics: .
		\boxtimes	Habitat for:
			Federally Listed species. Explain findings: .
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentr	ation	s of f	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	aract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(8)	-	
	(i)	_	vsical Characteristics:
		(a)	General Wetland Characteristics:
			Properties:
			Wetland size: acres Wetland type. Explain: .
			Wetland quality. Explain: .
			Project wetlands cross or serve as state boundaries. Explain:
			Troject wettands cross of serve as state boundaries. Explain.
		(h)	General Flow Relationship with Non-TNW:
		(0)	Flow is: Pick List . Explain:
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW:
			Directly abutting
			Not directly abutting
			Discrete wetland hydrologic connection. Explain:
			Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		(4)	Proximity (Relationship) to TNW
		(u)	Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List.
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Che	emical Characteristics:
		Cha	racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
			characteristics; etc.). Explain: .
		Idei	ntify specific pollutants, if known:
	(iii)) Bio	logical Characteristics. Wetland supports (check all that apply):
		님	Riparian buffer. Characteristics (type, average width):
		님	Vegetation type/percent cover. Explain:
		Ш	Habitat for:
			Federally Listed species. Explain findings: Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings:
3.	Ch	aract	eristics of all wetlands adjacent to the tributary (if any)
٥.	J116		wetland(s) being considered in the cumulative analysis: Pick List
			proximately () acres in total are being considered in the cumulative analysis.
		11	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands adjacent to TNWs:		acres.	

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	seasonany
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such dding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
<u>SE</u>	CTIO	N IV: DATA SOURCES.
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SEC A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
B.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6295° N, Long112.6627° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
B.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	TA.	T	X	7
			13	1	v	1

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(i	v)	Biol	ogical Characteristics. Channel supports (check all that apply):
			\boxtimes	Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side.
				Wetland fringe. Characteristics: .
			\boxtimes	Habitat for:
				Federally Listed species. Explain findings:
				Fish/spawn areas. Explain findings:
				Other environmentally-sensitive species. Explain findings:
				Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
conce	entratio	ons	of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
	2. C	ha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(*	`	ъ	
	(i	.)	_	sical Characteristics:
			(a)	General Wetland Characteristics:
				Properties:
				Wetland size: acres
				Wetland type. Explain: Wetland quality, Explain:
				Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
				rioject wetiands cross of serve as state boundaries. Exprain.
			(h)	General Flow Relationship with Non-TNW:
			(0)	Flow is: Pick List . Explain:
				2.00 2.00 2.00 2.00 2.00 2.00 2.00 2.00
				Surface flow is: Pick List
				Characteristics: .
				Subsurface flow: Pick List. Explain findings: .
				Dye (or other) test performed:
			(c)	Wetland Adjacency Determination with Non-TNW:
				☐ Directly abutting
				Not directly abutting
				Discrete wetland hydrologic connection. Explain:
				Ecological connection. Explain:
				Separated by berm/barrier. Explain: .
			(4)	Proximity (Palationship) to TNW
			(u)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW.
				Project waters are Pick List aerial (straight) miles from TNW.
				Flow is from: Pick List.
				Estimate approximate location of wetland as within the Pick List floodplain.
				250 mater approximate resource of western and a resource process.
	(i	i)	Che	emical Characteristics:
			Cha	racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
				characteristics; etc.). Explain: .
			Iden	ntify specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply):
			Ц	Riparian buffer. Characteristics (type, average width):
			\sqcup	Vegetation type/percent cover. Explain: .
			Ш	Habitat for:
				Federally Listed species. Explain findings:
				Fish/spawn areas. Explain findings:
				Other environmentally-sensitive species. Explain findings:
				Aquatic/wildlife diversity. Explain findings: .
	3. C	ho.	rant	eristics of all wetlands adjacent to the tributary (if any)
,	<i>J</i> . (ııd		wetland(s) being considered in the cumulative analysis: Pick List
				proximately () acres in total are being considered in the cumulative analysis.
			, th	/ ucres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Adja	acent Wetlands.	Check all that apply	and provide size	estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	■ Wetlands adj	acent to TNWs:	acres.		

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
JSC	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
Identify water body and summarize rationale supporting determination:
Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
TION IV: DATA SOURCES.
UPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

A.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6279° N, Long112.6628° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
B.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Impoundments of jurisdictional waters

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

SECTION I: BACKGROUND INFORMATION

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	N	X/
			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Cobbles Gravel Bedrock Other. Explain: Muck Concrete Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain:
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(i·		R N N N N N N N N N	cical Characteristics. Channel supports (check all that apply): Expansion corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Vetland fringe. Characteristics: Iabitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentratio	ons (d sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. C	har	acteri	istics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i)		(a) <u>C</u>	cal Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
	(General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			curface flow is: Pick List Characteristics:
		S	bubsurface flow: Pick List. Explain findings: Dye (or other) test performed:
	(Vetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
	(P P F	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Plow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(ii	(Chara c	ical Characteristics: cterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed haracteristics; etc.). Explain: fy specific pollutants, if known:
(i	iii)] 	R V H C	cical Characteristics. Wetland supports (check all that apply): Liparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Labitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. C		All we	istics of all wetlands adjacent to the tributary (if any) etland(s) being considered in the cumulative analysis: Pick List eximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	ljacent Wetlands.	Check all that a	apply and provide siz	e estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: .
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6561° N, Long112.6635° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS
A.	RHA SECTION 10 DETERMINATION OF JURISDICTION.
The	
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
rev:	iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
B.	iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
B.	iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain: CWA SECTION 404 DETERMINATION OF JURISDICTION.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

acres.

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

TINIXX
TENTAX/

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 2 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

 Wetland fringe. Characteristics: . Habitat for: □ Federally Listed species. Explain fin □ Fish/spawn areas. Explain findings: □ Other environmentally-sensitive spec 	average width): xeroriparian, 0-5 feet wide on either side. lings:
concentrations of food sources and shelter for mammals, bird	
2. Characteristics of wetlands adjacent to non-TN	W that flow directly or indirectly into TNW
(i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state be	oundaries. Explain:
(b) <u>General Flow Relationship with Non-TN</u> Flow is: Pick List . Explain:	<u>W</u> :
Surface flow is: Pick List Characteristics:	
Subsurface flow: Pick List. Explain find Dye (or other) test performed:	lings:
(c) Wetland Adjacency Determination with Directly abutting Not directly abutting Discrete wetland hydrologic com Ecological connection. Explain: Separated by berm/barrier. Expl.	nection. Explain:
(d) Proximity (Relationship) to TNW Project wetlands are Pick List river mile Project waters are Pick List aerial (straightful flow) is from: Pick List. Estimate approximate location of wetland	ght) miles from TNW.
(ii) Chemical Characteristics: Characterize wetland system (e.g., water color characteristics; etc.). Explain: Identify specific pollutants, if known:	is clear, brown, oil film on surface; water quality; general watershed
(iii) Biological Characteristics. Wetland supporting Riparian buffer. Characteristics (type, as Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain find: Fish/spawn areas. Explain findings: Other environmentally-sensitive specting Aquatic/wildlife diversity. Explain findings.	erage width): . dings: . tes. Explain findings:
3. Characteristics of all wetlands adjacent to the translation All wetland(s) being considered in the cumula Approximately () acres in total are being considered in the cumula are being cons	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Adj	acent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands ad	acent to TNWs:	acres.	

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
DE	CRADATION OR DESTRUCTION OF WHICH COLL DIAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

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 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6567° N, Long112.6646° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ware Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

acres.

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:				
	Tributary properties with respect to top of bank (estimate): Average width: 6 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).				
	Primary tributary substrate composition (check all that apply): Silts Sands Cobbles Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck				
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %				
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days Project Area. Other information on duration and volume:				
	Surface flow is: Discrete. Characteristics:				
	Subsurface flow: No . Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:				
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community				
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:				
Cha	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:				

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		logical Characteristics. Channel supports (check all that apply):
			Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
			Habitat for:
			Federally Listed species. Explain findings:
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
concentra	ations	s of f	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2	Cha		within a found and a discount to many TNIXI that flow discoult on indicately into TNIXI
2.	Cna	aract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		rsical Characteristics:
		(a)	General Wetland Characteristics: Perperties:
			Properties: Wetland size: acres
			Wetland type. Explain: .
			Wetland quality. Explain: .
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW:
			Flow is: Pick List . Explain:
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed: .
		(c)	Wetland Adjacency Determination with Non-TNW:
			Directly abutting
			☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain:
			Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		(d)	Proximity (Polationship) to TNW
		(u)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List.
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)		emical Characteristics:
		Cha	racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		Idei	characteristics; etc.). Explain: tify specific pollutants, if known: .
	(***)) Dia	logical Characteristics. Wetland supports (check all that apply):
	(III)		Riparian buffer. Characteristics (type, average width):
			Vegetation type/percent cover. Explain:
			Habitat for:
			Federally Listed species. Explain findings:
			☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings:
2	CI.		
3.	Cha		eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List
			proximately () acres in total are being considered in the cumulative analysis.
		11	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	ljacent Wetlands.	Check all that a	apply and provide siz	e estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
TO	
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY): 10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
Α.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6404° N, Long112.6644° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
B.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

$\mbox{\bf b.}\;\;\mbox{Identify}\;\mbox{(estimate)}\;\mbox{size}\;\mbox{of waters}\;\mbox{of}\;\mbox{the}\;\mbox{U.S.}\;\mbox{in}\;\mbox{the}\;\mbox{review}\;\mbox{area:}\;$

Impoundments of jurisdictional waters

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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	(iv)	Biological Characteristics. Channel supports (check all that apply):	
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:	
		Habitat for:	
		Federally Listed species. Explain findings:	
		Fish/spawn areas. Explain findings:	
		Other environmentally-sensitive species. Explain findings:	
concentra	ations	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater s of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.	
2	Cha	and desirable of modern de adicionate to many TNNNV also a flore discoultre on in discoultre into TNNNV	
2.	Cna	aracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW	
	(i)	Physical Characteristics:	
		(a) General Wetland Characteristics: Proporties:	
		Properties: Wetland size: acres	
		Wetland type. Explain: .	
		Wetland quality. Explain: .	
		Project wetlands cross or serve as state boundaries. Explain:	
		(b) General Flow Relationship with Non-TNW:	
		Flow is: Pick List . Explain:	
		Surface flow is: Pick List	
		Characteristics: .	
		Subsurface flow: Pick List. Explain findings: .	
		Dye (or other) test performed:	
		(c) Wetland Adjacency Determination with Non-TNW:	
		Directly abutting	
		□ Not directly abutting	
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:	
		Separated by berm/barrier. Explain:	
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are Pick List river miles from TNW.	
		Project waters are Pick List aerial (straight) miles from TNW.	
		Flow is from: Pick List.	
		Estimate approximate location of wetland as within the Pick List floodplain.	
	(ii)	Chemical Characteristics:	
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed	
		characteristics; etc.). Explain: Identify specific pollutants, if known:	
	(iii)) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):	
		Vegetation type/percent cover. Explain:	
		Habitat for:	
		Federally Listed species. Explain findings:	
		Fish/spawn areas. Explain findings:	
		☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:	
3.	Cha	aracteristics of all wetlands adjacent to the tributary (if any)	
		All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.	
		Approximately () acres in total are being considered in the cumulative aliarysis.	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and A	djacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands a	djacent to TNWs:	acres.	

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISC	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
		National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6407° N, Long112.6651° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
The	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the liew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

$\mbox{\bf b.}\;\;\mbox{Identify}\;\mbox{(estimate)}\;\mbox{size}\;\mbox{of waters}\;\mbox{of}\;\mbox{the}\;\mbox{U.S.}\;\mbox{in}\;\mbox{the}\;\mbox{review}\;\mbox{area:}\;$

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Impoundments of jurisdictional waters

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 1 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 1 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:
concentra	itions	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater pod sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Phy	sical Characteristics:
		(a)	General Wetland Characteristics: Properties:
			Wetland size: acres
			Wetland type. Explain: .
			Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Trow is. Tek List. Explain.
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed: .
		(c)	Wetland Adjacency Determination with Non-TNW:
			Directly abutting
			☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain:
			Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW
			Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List .
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Che	emical Characteristics:
	(11)		racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		T 1	characteristics; etc.). Explain:
		iaen	ntify specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply):
		H	Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain:
			Habitat for:
			Federally Listed species. Explain findings: Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings: .
3.	Cha	racte	eristics of all wetlands adjacent to the tributary (if any)
		All	wetland(s) being considered in the cumulative analysis: Pick List
		App	proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

l.	TNWs and A	djacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	■ Wetlands	adjacent to TNWs:	acres.	

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: .
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	fr w Ir	which are or could be used by interstate or foreign travelers for recreational or other purposes. The common which fish or shellfish are or could be taken and sold in interstate or foreign commerce. Thich are or could be used for industrial purposes by industries in interstate commerce. The common c
	Ident	ify water body and summarize rationale supporting determination:
	T	de estimates for jurisdictional waters in the review area (check all that apply): ributary waters: linear feet width (ft). ther non-wetland waters: acres. Identify type(s) of waters: Vetlands: acres.
F.		JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	factor judgm I I I	de acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR is (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a find	de acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ing is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
SE	CTION	IV: DATA SOURCES.
A.	and re	ORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked equested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: J.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. J.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): *EMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
с.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6406° N, Long112.6657° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and
	Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

acres.

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

Wetlands:

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			13	1	v	1

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 1 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 2 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	Bio	logical Characteristics. Channel supports (check all that apply):
		\boxtimes	Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side.
			Wetland fringe. Characteristics: .
		\boxtimes	Habitat for:
			Federally Listed species. Explain findings:
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentr	ation	s of f	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	aract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(4)	-	
	(i)	_	vsical Characteristics:
		(a)	General Wetland Characteristics:
			Properties:
			Wetland size: acres
			Wetland type. Explain:
			Wetland quality. Explain:
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Polationship with Non TNW:
		(0)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			How is. Fire Elst. Explain.
			Surface flow is: Pick List
			Characteristics: .
			Characteristics
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW:
			Directly abutting
			☐ Not directly abutting
			☐ Discrete wetland hydrologic connection. Explain: .
			Ecological connection. Explain:
			Separated by berm/barrier. Explain: .
		(d)	Proximity (Relationship) to TNW
			Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List.
			Estimate approximate location of wetland as within the Pick List floodplain.
	(#)	Ch	emical Characteristics:
	(11)		racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		CIIa	characteristics; etc.). Explain:
		Ido	ntify specific pollutants, if known:
		Iuci	any specific polititants, it known.
	(iii) Rio	logical Characteristics. Wetland supports (check all that apply):
	(111		Riparian buffer. Characteristics (type, average width):
		Ħ	Vegetation type/percent cover. Explain: .
		Ħ	Habitat for:
			Federally Listed species. Explain findings: .
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings:
3.	Cha		eristics of all wetlands adjacent to the tributary (if any)
			wetland(s) being considered in the cumulative analysis: Pick List
		App	proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	ljacent Wetlands.	Check all that a	apply and provide siz	e estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is personnial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
1)E	CRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6542° N, Long112.6678° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

b. Identify (estimate) size of waters of the U.S. in the review area:

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

		w

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 1 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW^5 : Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:					
	Tributary properties with respect to top of bank (estimate): Average width: 2 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).					
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:					
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %					
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days Project Area. Other information on duration and volume:					
	Surface flow is: Discrete. Characteristics:					
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:					
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community					
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.					
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:					

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:
concentra	ations	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Phy	sical Characteristics:
		(a)	General Wetland Characteristics: Properties:
			Wetland size: acres
			Wetland type. Explain: Wetland quality. Explain:
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW:
			Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		()	
		(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting
			☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain:
			Ecological connection. Explain:
			Separated by berm/barrier. Explain: .
		(d)	Proximity (Relationship) to TNW
			Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List.
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)		mical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
			characteristics; etc.). Explain: .
		Iden	tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
			Vegetation type/percent cover. Explain: .
			Habitat for: Federally Listed species. Explain findings:
			Fish/spawn areas. Explain findings:
			☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:
3.	Cha	racte	eristics of all wetlands adjacent to the tributary (if any)
3.	CHA	All	wetland(s) being considered in the cumulative analysis: Pick List
		App	roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that a	apply and provide siz	ze estimates in review area:	
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	 □ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: □ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:				
	Identify water body and summarize rationale supporting determination:					
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.				
F.	NOI	N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):				
	facto	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.				
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.				
SE	<u>CTIO</u>	N IV: DATA SOURCES.				
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.				
	Frov a firm	ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best profession ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres. vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where dding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres. NIV: DATA SOURCES. PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where chec requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf or the applicant/consultant: Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: U.S. Geological Survey Hydrologic Atlas: U.S.G. Sold Survey Hydrologic Atlas: U.S.D.A Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite scale & quad name: 7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)				

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6398° N, Long112.668° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Non-regulated waters/wetlands (check if applicable):³

Elevation of established OHWM (if known):

b. Identify (estimate) size of waters of the U.S. in the review area:

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	TA.	T	X	7
			13	1	v	1

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 2 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:
concentrat	tions	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

TNWs and A	djacent Wetlands.	Check all that apply	y and provide size estimates in review area:
TNWs:	linear feet	width (ft), Or,	acres.
Wetlands	adjacent to TNWs:	acres.	

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	GRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:				
	Identify water body and summarize rationale supporting determination:					
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.				
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):				
	factor judg	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.				
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.				
SEC	CTIO	NIV: DATA SOURCES.				
	SUPH and	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.				
	\bowtie	Photographs: 🔀 Aerial (Name & Date):Google Earth, May 26, 2013.				

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	<u>CTION I: BACKGROUND INFORMATION</u> REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6316° N, Long112.6686° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

c. Limits (boundaries) of jurisdiction based on: Pick List

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 2 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentrat	tions	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	mical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that a	apply and provide siz	ze estimates in review area:	
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	N IV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date):	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.631° N. Long112.669° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS
Α.	RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

3 Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. ⁷ Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	Biological Characteristics. Channel supports (check all that apply):
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		Other environmentally-sensitive species. Explain findings: A question wildlife discognity. Explain findings: Exhamoral minerian comiders turnically provide consequent and the sense of th
concentra	ations	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater sof food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
	~	
2.	Cha	aracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Physical Characteristics:
		(a) <u>General Wetland Characteristics:</u>
		Properties: Wetland size: acres
		Wetland size: acres Wetland type. Explain: .
		Wetland quality. Explain: .
		Project wetlands cross or serve as state boundaries. Explain:
		(b) General Flow Relationship with Non-TNW:
		Flow is: Pick List. Explain:
		Surface flow is: Pick List
		Characteristics: .
		Subsurface flow: Pick List. Explain findings: .
		Dye (or other) test performed:
		(c) Wetland Adjacency Determination with Non-TNW:
		Directly abutting
		□ Not directly abutting
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
		Separated by berm/barrier. Explain:
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are Pick List river miles from TNW.
		Project waters are Pick List aerial (straight) miles from TNW.
		Flow is from: Pick List.
		Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Chemical Characteristics:
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		characteristics; etc.). Explain: Identify specific pollutants, if known:
	(iii)	Biological Characteristics. Wetland supports (check all that apply):
		Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain:
		Habitat for:
		Federally Listed species. Explain findings: .
		Fish/spawn areas. Explain findings:
		Other environmentally-sensitive species. Explain findings:
		Aquatic/wildlife diversity. Explain findings:
3.	Cha	aracteristics of all wetlands adjacent to the tributary (if any)
		All wetland(s) being considered in the cumulative analysis: Pick List
		Approximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	ljacent Wetlands.	Check all that a	apply and provide size	estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	seasonany
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6511° N, Long112.6708° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
SE	CTION II: SUMMARY OF FINDINGS
A.	RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 4 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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	(iv)		logical Characteristics. Channel supports (check all that apply):
			Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		\boxtimes	Habitat for:
			Federally Listed species. Explain findings:
			Fish/spawn areas. Explain findings:
			☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	ations	s of f	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
	~		
2.	Cha	aract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		sical Characteristics:
		(a)	General Wetland Characteristics:
			Properties: Wetland size: acres
			Wetland type. Explain: .
			Wetland quality. Explain: .
			Project wetlands cross or serve as state boundaries. Explain: .
		(b)	General Flow Relationship with Non-TNW:
		` ′	Flow is: Pick List. Explain:
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW:
			Directly abutting
			Not directly abutting
			☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		<i>(</i> 1)	
		(a)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List.
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)		emical Characteristics:
		Cha	racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		T.J	characteristics; etc.). Explain: tify specific pollutants, if known:
		idei	itily specific pollutants, il known:
	(iii)	Bio!	logical Characteristics. Wetland supports (check all that apply):
		H	Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain:
		H	Habitat for:
			Federally Listed species. Explain findings: .
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings: .
3.	Cha		eristics of all wetlands adjacent to the tributary (if any)
			wetland(s) being considered in the cumulative analysis: Pick List
		App	proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: .
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft).
	Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	Impoundments of jurisdictional waters. As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Idei	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	fact	wide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such dding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	ON IV: DATA SOURCES.
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

<u>SЕ</u> (CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6434° N, Long112.6703° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 1 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	ations	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	-	sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain:
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: https://example.com/racteristics/racteris
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands ad	jacent to TNWs:	acres.	

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
TO	
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date):	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
B.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6495° N, Long112.6711° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Impoundments of jurisdictional waters

Elevation of established OHWM (if known): . .

2. Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			13	1	v	1

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 1 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is:
	Tributary properties with respect to top of bank (estimate): Average width: 4 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: bed and banks the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. https://doi.org/10.1001/j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

	(iv)	\square	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:
concentra	itions	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	_	General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: tracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: titify specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide	e size estimates in review a	ırea:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands ad	ljacent to TNWs:	acres.			

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Idei	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
<u>SE</u>	CTIO	NIV: DATA SOURCES.
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

<u>SЕ</u> (CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
с.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6442° N, Long112.6712° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	we are a. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is:
	Tributary properties with respect to top of bank (estimate): Average width: 1 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. ⁷ Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. https://doi.org/10.1001/j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(i			gical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentration	ons		ad sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. C	har	acter	ristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i		(a) <u>(</u>	ical Characteristics: General Wetland Characteristics: Properties: Wetland size: Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
	(General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
		\$	Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
			Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
	•]]]	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(i	(Chara	nical Characteristics: acterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: ify specific pollutants, if known:
(iii)]	1 	gical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. C		All w	ristics of all wetlands adjacent to the tributary (if any) retland(s) being considered in the cumulative analysis: Pick List oximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and A	djacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	■ Wetlands a	adjacent to TNWs:	acres.	

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY): 10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Idei	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	fact	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such dding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	N IV: DATA SOURCES.
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SEC A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6451° N, Long112.6719° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	h Identify (estimate) size of waters of the U.S. in the review area.

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

acres.

linear feet: width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	N	X/
			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 1 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:						
	Tributary properties with respect to top of bank (estimate): Average width: 1 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).						
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:						
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %						
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:						
	Surface flow is: Discrete. Characteristics:						
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:						
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community						
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:						
Cha	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:						

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	tions	of fo	sood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: □ Directly abutting □ Not directly abutting □ Discrete wetland hydrologic connection. Explain: □ Ecological connection. Explain: □ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	mical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	ljacent Wetlands.	Check all that a	apply and provide siz	e estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	Impoundments of jurisdictional waters. As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	tify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION
A.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6487° N, Long112.6722° W. Universal Transverse Mercator:
	Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Impoundments of jurisdictional waters

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 1 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	Biological Characteristics. Channel supports (check all that apply):
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		Other environmentally-sensitive species. Explain findings:
concentra	ations	
2	Cha	and a state of smaller de address to the state of the sta
2.	Cna	aracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Physical Characteristics:
		(a) General Wetland Characteristics:
		Properties: Wetland size: acres
		Wetland type. Explain: .
		Wetland quality. Explain: .
		Project wetlands cross or serve as state boundaries. Explain:
		(b) General Flow Relationship with Non-TNW:
		Flow is: Pick List. Explain:
		Surface flow is: Pick List
		Characteristics: .
		Subsurface flow: Pick List. Explain findings: .
		Dye (or other) test performed:
		(c) Wetland Adjacency Determination with Non-TNW:
		Directly abutting
		□ Not directly abutting
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
		Separated by berm/barrier. Explain:
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are Pick List river miles from TNW.
		Project waters are Pick List aerial (straight) miles from TNW.
		Flow is from: Pick List.
		Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Chemical Characteristics:
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		characteristics; etc.). Explain: Identify specific pollutants, if known:
	(iii)	Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
		Vegetation type/percent cover. Explain:
		Habitat for:
		Federally Listed species. Explain findings:
		☐ Fish/spawn areas. Explain findings:
		☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:
_		
3.	Cha	aracteristics of all wetlands adjacent to the tributary (if any)
		All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.
		- pp

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and A	djacent Wetlands.	Check all that	apply and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	■ Wetlands	adjacent to TNWs:	acres.	

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: .
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Uther non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	Impoundments of jurisdictional waters. As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SE(CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
с.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6267° N. Long112.6725° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam.
	Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

acres.

Wetlands:

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below. ² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally"

⁽e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			13	1	v	1

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 1 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		logical Characteristics. Channel supports (check all that apply):
			Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		\boxtimes	Habitat for:
			Federally Listed species. Explain findings:
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
concentr	ation	s of f	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2	Ch		anistica of mother de alice and the most TNIXV that flowed in a fine address in discardar into TNIXV
2.	Cna	aracı	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		vsical Characteristics:
		(a)	General Wetland Characteristics: Proporties:
			Properties: Wetland size: acres
			Wetland type. Explain: .
			Wetland quality. Explain: .
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW:
			Flow is: Pick List. Explain:
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed: .
		(c)	Wetland Adjacency Determination with Non-TNW:
			Directly abutting
			☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain:
			Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		(d)	Proximity (Polationship) to TNW
		(u)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List.
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)		emical Characteristics:
		Cha	aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		Ide	characteristics; etc.). Explain: tify specific pollutants, if known: .
	(:::) Dia	logical Characteristics. Wetland supports (check all that apply):
	(111		Riparian buffer. Characteristics (type, average width):
			Vegetation type/percent cover. Explain:
			Habitat for:
			Federally Listed species. Explain findings:
			☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings:
3.	Ch	aract	eristics of all wetlands adjacent to the tributary (if any)
J.	CII		wetland(s) being considered in the cumulative analysis: Pick List
			proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	ljacent Wetlands.	Check all that a	apply and provide siz	e estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	 □ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: □ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Iden	tify water body and summarize rationale supporting determination:
		ide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	factor judge	ide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a find	ide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	N IV: DATA SOURCES.
A.		ORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6305° N, Long112.6729° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
The	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

(iv) Biological Characteristics. Channel supports (check all that apply): □ Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on eith Wetland fringe. Characteristics: □ Habitat for: □ Federally Listed species. Explain findings: □ Fish/spawn areas. Explain findings: □ Other environmentally-sensitive species. Explain findings: □ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically pro	
concentrations of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.	Wide somewhat greater
2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW	
(i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:	
(b) <u>General Flow Relationship with Non-TNW</u> : Flow is: <u>Pick List</u> . Explain:	
Surface flow is: Pick List Characteristics:	
Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:	
(c) Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:	
(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.	
 (ii) Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality characteristics; etc.). Explain: Identify specific pollutants, if known: 	r; general watershed
(iii) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:	
3. Characteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that a	apply and provide size	estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
TO	
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:					
	Identify water body and summarize rationale supporting determination:						
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.					
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):					
	facto	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.					
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.					
SEC	CTIO	N IV: DATA SOURCES.					
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.					

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
Α.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6401° N, Long112.6731° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Non-regulated waters/wetlands (check if applicable):³

Elevation of established OHWM (if known):

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: ☐ Natural ☐ Artificial (man-made). Explain: ☐ Manipulated (man-altered). Explain:				
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).				
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:				
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %				
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:				
	Surface flow is: Discrete. Characteristics: .				
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:				
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: The presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community				
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.				
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. atify specific pollutants, if known:				

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	ations	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain:
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	ljacent Wetlands.	Check all that a	apply and provide size	e estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
TO	OI ATEN HNITEDOTATE OD INTDA CTATEJ WATEDO INCLIINING ICOLATEN WETH ANDOTHE LIGE
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	ntify water body and summarize rationale supporting determination:
	vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.	N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	vide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	NIV: DATA SOURCES.
	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where check requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SEC	CTION I: BACKGROUND INFORMATION
Α.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6433° N, Long112.6736° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503
	Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	are Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Impoundments of jurisdictional waters

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	\square	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for:
			☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings: .
concentr	ations	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
			sical Characteristics:
	(1)		General Wetland Characteristics:
			Properties:
			Wetland size: acres Wetland type. Explain: .
			Wetland quality. Explain: .
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List . Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Che	emical Characteristics:
	(11)		racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		Ider	characteristics; etc.). Explain:
	(iii`	Biol	logical Characteristics. Wetland supports (check all that apply):
	,		Riparian buffer. Characteristics (type, average width):
		\mathbb{H}	Vegetation type/percent cover. Explain: Habitat for:
			Federally Listed species. Explain findings: .
			Fish/spawn areas. Explain findings:
			☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:
3.	Cha		eristics of all wetlands adjacent to the tributary (if any)
			wetland(s) being considered in the cumulative analysis: Pick List proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide	size estimates in review a	rea:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	ljacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SE(CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

<u>SЕ</u> .	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6313° N, Long112.6736° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and
	Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
revi	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

acres.

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	N	X/
			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 1 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 2 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		logical Characteristics. Channel supports (check all that apply):
			Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		\boxtimes	Habitat for:
			Federally Listed species. Explain findings:
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
concentra	ations	s of f	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2	Cha	4	oui-ties of mother deadle and TNIXI that flow discoult on indicately into TNIXI
2.	Cna	агасі	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		rsical Characteristics:
		(a)	General Wetland Characteristics: Perperties:
			Properties: Wetland size: acres
			Wetland type. Explain: .
			Wetland quality. Explain: .
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW:
			Flow is: Pick List . Explain:
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed: .
		(c)	Wetland Adjacency Determination with Non-TNW:
			Directly abutting
			☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain:
			Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		(d)	Proximity (Polationship) to TNW
		(u)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List.
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)		emical Characteristics:
		Cha	racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		Idei	characteristics; etc.). Explain: tify specific pollutants, if known: .
	(:::)) Dia	logical Characteristics. Wetland supports (check all that apply):
	(III)		Riparian buffer. Characteristics (type, average width):
		\Box	Vegetation type/percent cover. Explain:
			Habitat for:
			Federally Listed species. Explain findings:
			☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings:
2	CI.		
3.	Cha		eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List
			proximately () acres in total are being considered in the cumulative analysis.
		11	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide s	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
160	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRICTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
B.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
С.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.639° N. Long112.674° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
B.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

Wetlands:

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW^5 : Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: ☐ Natural ☐ Artificial (man-made). Explain: ☐ Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 2 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: $\overline{\text{No}}$. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. \square Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. ⁷ Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. https://doi.org/10.1001/j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

	ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentrations of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. Characte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
	Surface flow is: Pick List Characteristics:
	Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
Cha	mical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
(iii) Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
All	eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that a	pply and provide size estimate	es in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	RPWs that flow directly or indirectly into TNWs. ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are
	jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:			
	Identify water body and summarize rationale supporting determination:				
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.			
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):			
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.			
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.			
SEC	CTIO	NIV: DATA SOURCES.			
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.			

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6466° N. Long112.6758° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
Γhe	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Non-regulated waters/wetlands (check if applicable):³

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

4	FETS TWW
Ι.	INW

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles Drainage area: 3 square miles Average annual rainfall: 7 inches Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: ☐ Natural ☐ Artificial (man-made). Explain: ☐ Manipulated (man-altered). Explain:		
	Tributary properties with respect to top of bank (estimate): Average width: 4 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).		
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:		
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %		
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:		
Surface flow is: Discrete. Characteristics: Subsurface flow: No . Explain findings: groundwater is deep in the alluvium and these are only ephemeral of the Dye (or other) test performed:			
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.		
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:		

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentrat	tions	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	weristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Adj	jacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	■ Wetlands ad	jacent to TNWs:	acres.	

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	fro	hich are or could be used by interstate or foreign travelers for recreational or other purposes. om which fish or shellfish are or could be taken and sold in interstate or foreign commerce. hich are or could be used for industrial purposes by industries in interstate commerce. terstate isolated waters. Explain: ther factors. Explain:
	Identi	fy water body and summarize rationale supporting determination:
	Tr	le estimates for jurisdictional waters in the review area (check all that apply): ibutary waters: linear feet width (ft). ther non-wetland waters: acres. Identify type(s) of waters: fetlands: acres.
F.	If W	JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): f potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Vetland Delineation Manual and/or appropriate Regional Supplements. eview area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Vaters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	factors judgm N L C	le acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR is (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ent (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Nakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Vetlands: acres.
	a findi	le acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ing is required for jurisdiction (check all that apply): Jon-wetland waters (i.e., rivers, streams): linear feet, width (ft). akes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SE	<u>CTION</u>	IV: DATA SOURCES.
A.	and re	PRTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked quested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Office does not concur with data sheets/delineation report. Other does not concur with data sheets/

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6469° N, Long112.675° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS
Α.	RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the new area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 1 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW^5 : Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:					
	Tributary properties with respect to top of bank (estimate): Average width: 4 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).					
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:					
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %					
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:					
	Surface flow is: Discrete. Characteristics:					
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:					
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community					
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:					
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:					

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	Biological Characteristics. Channel supports (check all that apply):
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		Other environmentally-sensitive species. Explain findings:
concentra	ations	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2	Cha	we stanistics of modern to discount to your TNIXV that flow discoult on in discoult into TNIXV
2.	Cna	racteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Physical Characteristics:
		(a) General Wetland Characteristics:
		Properties: Wetland size: acres
		Wetland type. Explain: .
		Wetland quality. Explain: .
		Project wetlands cross or serve as state boundaries. Explain:
		(b) General Flow Relationship with Non-TNW:
		Flow is: Pick List. Explain: .
		Surface flow is: Pick List
		Characteristics: .
		Subsurface flow: Pick List. Explain findings: .
		Dye (or other) test performed: .
		(c) Wetland Adjacency Determination with Non-TNW:
		☐ Directly abutting
		□ Not directly abutting
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
		Separated by berm/barrier. Explain:
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are <u>Pick List</u> river miles from TNW.
		Project waters are Pick List aerial (straight) miles from TNW.
		Flow is from: Pick List.
		Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Chemical Characteristics:
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		characteristics; etc.). Explain: Identify specific pollutants, if known:
	(iii)	Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
		Vegetation type/percent cover. Explain:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:
3.	Cha	racteristics of all wetlands adjacent to the tributary (if any)
		All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.
		Approximatery () acres in total are being considered in the cumulative aliarysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	ljacent Wetlands.	Check all that a	apply and provide siz	e estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
TO	
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	from which fish which are or cou	ld be used by interstate or for or shellfish are or could be to ld be used for industrial purp I waters. Explain: xplain:	aken and sold in inte	rstate or foreign com	merce.	
	Identify water body	and summarize rationale s	supporting determi	nation:		
	Tributary waters: Other non-wetlar Identify type(nd waters: acres.	review area (check a h (ft).	ll that apply):		
F.	☐ If potential wetl Wetland Deline. ☐ Review area inc ☐ Prior to the "Migratory ☑ Waters do not n ☐ Other: (explain,	onal waters, include ands were assessed within the ation Manual and/or appropriluded isolated waters with not Jan 2001 Supreme Court de Bird Rule" (MBR). seet the "Significant Nexus" if not covered above):	ne review area, these iate Regional Supple to substantial nexus to ecision in "SWANCC standard, where suc	areas did not meet thements. o interstate (or foreig '," the review area wo h a finding is require	e criteria in the 1987 Corps n) commerce. buld have been regulated based for jurisdiction. Explain:	sed <u>solely</u> on the
	factors (i.e., presence judgment (check all t	aters (i.e., rivers, streams): acres.		ies, use of water for width (ft).		
	a finding is required	nates for non-jurisdictional v for jurisdiction (check all that aters (i.e., rivers, streams): acres. and waters: acres. List acres.		width (ft).	the "Significant Nexus" star	ndard, where such
SEC	ECTION IV: DATA S	OURCES.				
A.	and requested, appro	Survey Hydrologic Atlas: data. 12 digit HUC maps. Survey map(s). Cite scale & Resources Conservation Serveds inventory map(s). Cite natural and inventory map(s): laps:	low): a behalf of the applicant/o alf of the applicant/o on report. delineation report. c quad name:7.5 Serivice Soil Survey. Citame:	ant/consultant: consultant. es Daggs Tank, Ariz ation: .	ona.	l, where checked

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
Α.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
B.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6321° N, Long112.6744° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

$\mbox{\bf b.}\;\;\mbox{Identify}\;\mbox{(estimate)}\;\mbox{size}\;\mbox{of waters}\;\mbox{of}\;\mbox{the}\;\mbox{U.S.}\;\mbox{in}\;\mbox{the}\;\mbox{review}\;\mbox{area:}\;$

Impoundments of jurisdictional waters

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			13	1	v	1

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 1 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		logical Characteristics. Channel supports (check all that apply):
			Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
			Habitat for:
			Federally Listed species. Explain findings:
			Fish/spawn areas. Explain findings:
			☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	ations	s of f	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
	~		
2.	Cha	aract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		vsical Characteristics:
		(a)	General Wetland Characteristics:
			Properties: Wetland size: acres
			Wetland type. Explain: .
			Wetland quality. Explain:
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW:
		. ,	Flow is: Pick List. Explain:
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed: .
		(c)	Wetland Adjacency Determination with Non-TNW:
			Directly abutting
			Not directly abutting
			☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		<i>(</i> 1)	
		(a)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List.
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)		emical Characteristics:
		Cha	aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		T.J.,	characteristics; etc.). Explain:
		Idei	ntify specific pollutants, if known:
	(iii)	Bio!	logical Characteristics. Wetland supports (check all that apply):
		H	Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain:
		H	Habitat for:
			Federally Listed species. Explain findings: .
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings: .
3.	Cha		eristics of all wetlands adjacent to the tributary (if any)
			wetland(s) being considered in the cumulative analysis: Pick List
		App	proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide s	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: .
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6263° N, Long112.6753° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS
Α.	RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the few area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are **25-30** river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: ☐ Natural ☐ Artificial (man-made). Explain: ☐ Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 1 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. ⁷ Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. https://example.com/racteristics/racteri

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

	(iv)		logical Characteristics. Channel supports (check all that apply):
			Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		\boxtimes	Habitat for:
			Federally Listed species. Explain findings:
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
concen	tration	s of f	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
	~		
2.	Ch	aract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		vsical Characteristics:
		(a)	General Wetland Characteristics:
			Properties: Wetland size: acres
			Wetland size: acres Wetland type. Explain: .
			Wetland quality. Explain:
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW:
		(-)	Flow is: Pick List. Explain: .
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW:
			Directly abutting
			Not directly abutting
			☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		(1)	
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List.
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cho	emical Characteristics:
		Cha	racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
			characteristics; etc.). Explain:
		Idei	ntify specific pollutants, if known:
	(iii) Bio	logical Characteristics. Wetland supports (check all that apply):
		H	Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain:
		H	Habitat for:
			Federally Listed species. Explain findings:
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings: .
3.	Ch		eristics of all wetlands adjacent to the tributary (if any)
			wetland(s) being considered in the cumulative analysis: Pick List
		App	proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands ad	jacent to TNWs:	acres.	

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	seasonary.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:				
Identify water body and summarize rationale supporting determination:						
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.				
F.	NOI	N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):				
	facto	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.				
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.				
SEC	CTIO	N IV: DATA SOURCES.				
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.				
	Frov a firm	ide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best profession ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres. ide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where sting is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres. NIV: DATA SOURCES. PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where check requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant: Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS NHD data. USGS NHD data. USGS NHD data. USGO Rological Survey map(s). Cite scale & quad name: 7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s).				

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date):	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

<u> SE (</u> А.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
с.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6338° N, Long112.6754° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and
	Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

acres.

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below. ² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			13	1	v	1

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:					
	Tributary properties with respect to top of bank (estimate): Average width: 2 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).					
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:					
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %					
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:					
	Surface flow is: Discrete. Characteristics:					
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:					
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community					
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.					
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:					

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	Bio	logical Characteristics. Channel supports (check all that apply):
		\boxtimes	Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side.
			Wetland fringe. Characteristics: .
		\boxtimes	Habitat for:
			Federally Listed species. Explain findings: .
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentr	ation	s of f	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	aract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(4)	-	
	(i)	_	vsical Characteristics:
		(a)	General Wetland Characteristics:
			Properties:
			Wetland size: acres
			Wetland type. Explain:
			Wetland quality. Explain:
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Polationship with Non TNW:
		(0)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			How is. Fire Dist. Explain.
			Surface flow is: Pick List
			Characteristics: .
			Characteristics
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW:
			Directly abutting
			☐ Not directly abutting
			☐ Discrete wetland hydrologic connection. Explain: .
			Ecological connection. Explain:
			Separated by berm/barrier. Explain: .
		(d)	Proximity (Relationship) to TNW
			Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List.
			Estimate approximate location of wetland as within the Pick List floodplain.
	(#)	Ch	emical Characteristics:
	(11)		racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		CIIa	characteristics; etc.). Explain:
		Ido	ntify specific pollutants, if known:
		Iuci	any specific polititants, it known.
	(iii) Rio	logical Characteristics. Wetland supports (check all that apply):
	(111		Riparian buffer. Characteristics (type, average width):
		Ħ	Vegetation type/percent cover. Explain: .
		Ħ	Habitat for:
			Federally Listed species. Explain findings: .
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings:
3.	Cha		eristics of all wetlands adjacent to the tributary (if any)
			wetland(s) being considered in the cumulative analysis: Pick List
		App	proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	apply and provide siz	e estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands ac	ljacent to TNWs:	acres.		

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	seasonany
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
<u>SE</u>	CTIO	NIV: DATA SOURCES.
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6259° N, Long112.6763° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

c. Limits (boundaries) of jurisdiction based on: Pick List

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	N	X/
			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 1 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	\boxtimes	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side.
			Wetland fringe. Characteristics: . Habitat for:
			Federally Listed species. Explain findings: .
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
concentr	ations	s of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Phy	vsical Characteristics:
	(-)		General Wetland Characteristics:
			Properties:
			Wetland size: acres
			Wetland type. Explain: Wetland gyality. Explain:
			Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW:
			Flow is: Pick List. Explain:
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW:
		(0)	Directly abutting
			Not directly abutting
			Discrete wetland hydrologic connection. Explain:
			Ecological connection. Explain:
			Separated by berm/barrier. Explain: .
		(d)	Proximity (Relationship) to TNW
			Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List.
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)		emical Characteristics: aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		Ciia	characteristics; etc.). Explain:
		Ider	ntify specific pollutants, if known:
	(iii	Riol	logical Characteristics. Wetland supports (check all that apply):
	()		Riparian buffer. Characteristics (type, average width):
			Vegetation type/percent cover. Explain: .
		Ш	Habitat for:
			Federally Listed species. Explain findings: Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings:
3.	Chs	ract	eristics of all wetlands adjacent to the tributary (if any)
٠.	VIII		wetland(s) being considered in the cumulative analysis: Pick List
		App	proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide	size estimates in review area:	
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands ac	ljacent to TNWs:	acres.			

2.	 □ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: □ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
		100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.631° N, Long112.6767° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

(iv)	Biological Characteristics. Channel supports (check all that apply): ☐ Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. ☐ Wetland fringe. Characteristics: ☐ Habitat for: ☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentration	s of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. Ch	aracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i)	Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
	(b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
	Surface flow is: Pick List Characteristics:
	Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
	(c) Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
	(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(ii)	Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Identify specific pollutants, if known:
(iii	Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. Ch	All wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

l.	TNWs and A	djacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	■ Wetlands	adjacent to TNWs:	acres.	

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
TO	
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	N IV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
A.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
B.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6457° N, Long112.6783° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) İnto which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Impoundments of jurisdictional waters

Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable):³

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Isolated (interstate or intrastate) waters, including isolated wetlands

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentrat	tions	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	mical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide s	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	GRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Idei	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: . Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	wide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	N IV: DATA SOURCES.
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
с.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6456° N, Long112.6784° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and
	Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: **Pick List** Elevation of established OHWM (if known):

acres.

Wetlands:

^{2.} Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.
² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally"

⁽e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 1 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 3 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:				
	Tributary properties with respect to top of bank (estimate): Average width: 2 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).				
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:				
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %				
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:				
	Surface flow is: Discrete. Characteristics:				
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:				
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community				
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.				
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:				

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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	(iv)	Biological Characteristics. Channel supports (check all that apply):
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		Other environmentally-sensitive species. Explain findings:
concentra	ations	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2	Cha	was the side of was land and a discount to your TNINN should flow discould a similar state TNINN
2.	Cna	racteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Physical Characteristics:
		(a) General Wetland Characteristics: Proportion:
		Properties: Wetland size: acres
		Wetland type. Explain: .
		Wetland quality. Explain: .
		Project wetlands cross or serve as state boundaries. Explain:
		(b) General Flow Relationship with Non-TNW:
		Flow is: Pick List . Explain: .
		Surface flow is: Pick List
		Characteristics: .
		Subsurface flow: Pick List. Explain findings: .
		Dye (or other) test performed: .
		(c) Wetland Adjacency Determination with Non-TNW:
		☐ Directly abutting
		□ Not directly abutting
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
		Separated by berm/barrier. Explain:
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are <u>Pick List</u> river miles from TNW.
		Project waters are Pick List aerial (straight) miles from TNW.
		Flow is from: Pick List.
		Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Chemical Characteristics:
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		characteristics; etc.). Explain: Identify specific pollutants, if known:
	(iii)	Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
		Vegetation type/percent cover. Explain:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:
		<u> </u>
3.	Cha	racteristics of all wetlands adjacent to the tributary (if any)
		All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.
		Approximately () acres in total are being considered in the cumulative allarysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	ljacent to TNWs:	acres.			

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Scasonary.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:			
	Identify water body and summarize rationale supporting determination:				
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.			
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):			
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.			
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.			
SEC	CTIO	NIV: DATA SOURCES.			
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.			

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

<u> SE</u> .	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6246° N, Long112.6781° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and
	Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
revi	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

acres.

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	N	X/
			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. ⁷ Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics tidal gauges other (list):
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. atify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

	(iv)	\boxtimes	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
			Habitat for: Federally Listed species. Explain findings:
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
concentra	tions	s of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater pod sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Phy	sical Characteristics:
		(a)	General Wetland Characteristics:
			Properties:
			Wetland size: acres Wetland type. Explain: .
			Wetland quality. Explain: .
			Project wetlands cross or serve as state boundaries. Explain: .
		(b)	General Flow Relationship with Non-TNW:
			Flow is: Pick List. Explain: .
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed: .
		(c)	Wetland Adjacency Determination with Non-TNW:
			☐ Directly abutting ☐ Not directly abutting
			Discrete wetland hydrologic connection. Explain:
			Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW
			Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List .
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Che	emical Characteristics:
	` /		racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		Idor	characteristics; etc.). Explain:
		idei	itily specific poliutants, ii known.
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
		H	Vegetation type/percent cover. Explain:
			Habitat for:
		_	Federally Listed species. Explain findings:
			Fish/spawn areas. Explain findings:
			☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:
3.	Cha	racte	eristics of all wetlands adjacent to the tributary (if any)
٠.			wetland(s) being considered in the cumulative analysis: Pick List
		App	proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands ad	ljacent to TNWs:	acres.	

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:			
	Identify water body and summarize rationale supporting determination:				
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.			
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):			
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.			
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.			
SEC	CTIO	NIV: DATA SOURCES.			
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.			
	\boxtimes				

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
с.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6298° N, Long112.6733° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and
	Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
SE A.	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	we area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain: "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: ☐ Natural ☐ Artificial (man-made). Explain: ☐ Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. ⁷ Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. https://doi.org/10.1001/j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(i	iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentrati	ons	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. (Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i			Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(1		Char	mical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
((iii)		ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. (All v	eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	ljacent Wetlands.	Check all that a	apply and provide si	ze estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	 RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	N IV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
		National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6337° N, Long112.6799° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) Into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(iv		Biological Characteristics. Channel supports (check all that apply): ☐ Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. ☐ Wetland fringe. Characteristics: ☐ Habitat for: ☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentratio	ns c	f food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. C	hara	acteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i)		Physical Characteristics: a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
	(b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
		Surface flow is: Pick List Characteristics:
		Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
	(Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
	(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(ii	(Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: dentify specific pollutants, if known:
(i	iii) I [[]	Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. C	A	Acteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	ljacent Wetlands.	Check all that a	apply and provide siz	e estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Scasonary.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:						
	Identify water body and summarize rationale supporting determination:							
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.						
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):						
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.						
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.						
SEC	CTIO	NIV: DATA SOURCES.						
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.						

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
A.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 7/29/2014
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6416° N, Long112.6827° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a
	different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
The	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 5 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:					
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).					
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:					
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %					
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:					
	Surface flow is: Discrete. Characteristics:					
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:					
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community					
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.					
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:					

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

(iv) Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater concentrations of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.	
2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW	
(i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:	
(b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:	
Surface flow is: Pick List Characteristics: .	
Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:	
(c) Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:	
(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.	
 (ii) Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Identify specific pollutants, if known: 	
(iii) Biological Characteristics. Wetland supports (check all that apply): □ Riparian buffer. Characteristics (type, average width): □ Vegetation type/percent cover. Explain: □ Habitat for: □ Federally Listed species. Explain findings: □ Fish/spawn areas. Explain findings: □ Other environmentally-sensitive species. Explain findings: □ Aquatic/wildlife diversity. Explain findings:	
3. Characteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide s	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6423° N, Long112.6823° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
SE	CTION II: SUMMARY OF FINDINGS
A.	RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
	CWI DECITOR WY DELEXIMATION OF GENERAL TOWN
Γhe	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
Γhe	

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 4 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 2 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	Biological Characteristics. Channel supports (check all that apply):
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		Other environmentally-sensitive species. Explain findings:
concentra	ations	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2	CI.	
2.	Cha	racteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Physical Characteristics:
		(a) General Wetland Characteristics:
		Properties: Wetland size: acres
		Wetland type. Explain: .
		Wetland quality. Explain: .
		Project wetlands cross or serve as state boundaries. Explain:
		(b) General Flow Relationship with Non-TNW:
		Flow is: Pick List. Explain:
		Surface flow is: Pick List
		Characteristics: .
		Subsurface flow: Pick List. Explain findings: .
		Dye (or other) test performed: .
		(c) Wetland Adjacency Determination with Non-TNW:
		Directly abutting
		Not directly abutting
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
		Separated by berm/barrier. Explain:
		(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW.
		Project waters are Pick List aerial (straight) miles from TNW.
		Flow is from: Pick List.
		Estimate approximate location of wetland as within the Pick List floodplain.
		Chemical Characteristics:
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		characteristics; etc.). Explain: Identify specific pollutants, if known:
	(iii)	Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
		Vegetation type/percent cover. Explain:
		Habitat for:
		Federally Listed species. Explain findings:
		☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings: .
		☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:
		<u> </u>
3.	Cha	racteristics of all wetlands adjacent to the tributary (if any)
		All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.
		representative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide s	size estimates in review ar	ea:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	ljacent to TNWs:	acres.			

2.	 □ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: □ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
	_	

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6301° N, Long112.683° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
SEC	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	we area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

b. Identify (estimate) size of waters of the U.S. in the review area:

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles Drainage area: 3 square miles Average annual rainfall: 7 inches Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 3 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 1 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentrat	tions	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	mical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands ad	jacent to TNWs:	acres.	

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	GRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
с.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6257° N, Long112.668° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and
	Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

acres.

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 1 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentrat	tions	of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	weristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide s	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
TO	
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	N IV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
		FEMA/FIRM maps: . 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

<u>SЕ</u> (CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
с.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6414° N, Long112.6842° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	N	X/
			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 1 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is:				
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).				
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:				
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %				
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:				
	Surface flow is: Discrete. Characteristics:				
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:				
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community				
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.				
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:				

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	\boxtimes	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side.
			Wetland fringe. Characteristics: . Habitat for:
			Federally Listed species. Explain findings: .
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
concentr	ations	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Phy	vsical Characteristics:
	(-)		General Wetland Characteristics:
		. ,	Properties:
			Wetland size: acres
			Wetland type. Explain:
			Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
			Froject wettailds cross of serve as state boundaries. Explain.
		(b)	General Flow Relationship with Non-TNW:
			Flow is: Pick List. Explain:
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW:
		(0)	Directly abutting
			Not directly abutting
			☐ Discrete wetland hydrologic connection. Explain: .
			Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW
			Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
			25 Minute approximate rocation of westand as within the 1 Kit 200 Hoodpitain.
	(ii)		emical Characteristics:
		Clia	aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:
		Ider	ntify specific pollutants, if known:
	(iii	Riol	logical Characteristics. Wetland supports (check all that apply):
	(111)		Riparian buffer. Characteristics (type, average width):
			Vegetation type/percent cover. Explain:
			Habitat for:
			Federally Listed species. Explain findings:
			☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings:
3.	Che	ract	eristics of all wetlands adjacent to the tributary (if any)
٥.	CII		wetland(s) being considered in the cumulative analysis: Pick List
			proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Adja	acent Wetlands.	Check all that apply	and provide size estimates in review are:	a:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands adj	acent to TNWs:	acres.		

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: .
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft).
	Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	Impoundments of jurisdictional waters. As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	PLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	l l	which are or could be used by interstate or foreign travelers for recreational or other purposes. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce. Which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Iden	tify water body and summarize rationale supporting determination:
		ide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR are (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a find	ide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
A.	and I	ORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6243° N, Long112.6844° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
SEC	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	we area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Non-regulated waters/wetlands (check if applicable):³

Elevation of established OHWM (if known):

b. Identify (estimate) size of waters of the U.S. in the review area:

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			13	1	v	1

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 5 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: ☐ Natural ☐ Artificial (man-made). Explain: ☐ Manipulated (man-altered). Explain:						
	Tributary properties with respect to top of bank (estimate): Average width: 1 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).						
	Primary tributary substrate composition (check all that apply): Silts Sands Cobbles Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck						
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %						
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:						
	Surface flow is: Discrete. Characteristics:						
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:						
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. ⁷ Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community						
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics tidal gauges other (list):						
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. atify specific pollutants, if known:						

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

	(iv)		logical Characteristics. Channel supports (check all that apply):
			Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		\boxtimes	Habitat for:
			Federally Listed species. Explain findings:
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
concentr	ation	s of f	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2	Cl	4	anistica of mother de aliceant to man TNIXI that flow dimenter an indimenter into TNIXI
2.	Cna	агасі	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		vsical Characteristics:
		(a)	General Wetland Characteristics: Proporties:
			Properties: Wetland size: acres
			Wetland type. Explain: .
			Wetland quality. Explain: .
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW:
			Flow is: Pick List. Explain:
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW:
			Directly abutting
			☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain:
			Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW
		(u)	Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List.
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)		emical Characteristics:
		Cha	aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:
		Ide	ntify specific pollutants, if known:
	(;;;) Rio	logical Characteristics. Wetland supports (check all that apply):
	(111)		Riparian buffer. Characteristics (type, average width):
			Vegetation type/percent cover. Explain: .
			Habitat for:
			☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings:
3.	Ch	aract	eristics of all wetlands adjacent to the tributary (if any)
		All	wetland(s) being considered in the cumulative analysis: Pick List
		App	proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands ad	ljacent to TNWs:	acres.	

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Idei	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	fact	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
<u>SE</u>	CTIO	N IV: DATA SOURCES.
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
Α.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
B.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6294° N, Long112.6844° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
	Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Impoundments of jurisdictional waters

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

4	FETS TWW
Ι.	INW

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 1 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics tidal gauges other (list):
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	\square	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:
concentra	ations	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	-	General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: attify specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide s	size estimates in review are	a:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands ac	ljacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRUCTION OF WHICH COLD DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	N IV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
		FEMA/FIRM maps: . 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6245° N. Long112.6844° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
Τhe	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

c. Limits (boundaries) of jurisdiction based on: Pick List

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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- 1		l T	O I	w

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 1 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 4 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW^5 : Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 1 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		logical Characteristics. Channel supports (check all that apply):
			Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		\boxtimes	Habitat for:
			Federally Listed species. Explain findings:
			Fish/spawn areas. Explain findings:
			Other environmentally-sensitive species. Explain findings:
concentra	ations	s of f	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2	Cha	4	within a found and a discount to many TNIXI that flow discoult on indicately into TNIXI
2.	Cna	aract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		rsical Characteristics:
		(a)	General Wetland Characteristics: Perperties:
			Properties: Wetland size: acres
			Wetland type. Explain: .
			Wetland quality. Explain: .
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW:
			Flow is: Pick List . Explain:
			Surface flow is: Pick List
			Characteristics: .
			Subsurface flow: Pick List. Explain findings: .
			Dye (or other) test performed: .
		(c)	Wetland Adjacency Determination with Non-TNW:
			Directly abutting
			☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain:
			Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		(4)	Proximity (Polotionship) to TNW
		(u)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List.
			Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)		emical Characteristics:
		Cha	racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		Idei	characteristics; etc.). Explain: tify specific pollutants, if known: .
	(:::)) Dia	logical Characteristics Wetland supports (sheek all that apply)
	(III)		logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
		\Box	Vegetation type/percent cover. Explain:
			Habitat for:
			Federally Listed species. Explain findings:
			☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings:
2	CI.		
3.	Cha		eristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List
			proximately () acres in total are being considered in the cumulative analysis.
		11	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	apply and provide	size estimates in review area:	
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands ac	djacent to TNWs:	acres.			

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	seasonany
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is
	directly abutting an RPW: Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:							
	Identify water body and summarize rationale supporting determination:							
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: . Wetlands: acres.							
F.	NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above): Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource:							
	Wetlands: acres. Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.							
SEC	CTION IV: DATA SOURCES.							
A. (SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s). FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.							

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
Α.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.633° N. Long112.6848° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	 Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required] Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): ¹ TNWs, including territorial seas
	Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

Wetlands:

b. Identify (estimate) size of waters of the U.S. in the review area:

linear feet:

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

width (ft) and/or 0 acres.

Non-wetland waters:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:					
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).					
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:					
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %					
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:					
	Surface flow is: Discrete. Characteristics:					
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:					
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community					
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics tidal gauges other (list):					
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:					

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

(iv	Biological Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentration	ns of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. CI	naracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i)	(a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain:
	Project wetlands cross or serve as state boundaries. Explain: (b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
	Surface flow is: Pick List Characteristics:
	Subsurface flow: Pick List . Explain findings: Dye (or other) test performed:
	(c) Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
	(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(ii	Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Identify specific pollutants, if known:
(ii	ii) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. CI	Approximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide s	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: .
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	N IV: DATA SOURCES.
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6265° N, Long112.6858° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

b. Identify (estimate) size of waters of the U.S. in the review area:

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 1 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: bed and banks the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics tidal gauges other (list):
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. atify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

	(iv)	Biological Characteristics. Channel supports (check all that apply):	
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:	
		Habitat for:	
		Federally Listed species. Explain findings:	
		Fish/spawn areas. Explain findings:	
		Other environmentally-sensitive species. Explain findings:	
concentra	ations	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater so of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.	
2	Cho	avactoristics of watlands adjacent to non TNW that flow directly as indirectly into TNW	
2.	Clia	aracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW	
	(i)	Physical Characteristics:	
		(a) General Wetland Characteristics: Properties:	
		Wetland size: acres	
		Wetland type. Explain: .	
		Wetland quality. Explain: .	
		Project wetlands cross or serve as state boundaries. Explain:	
		(b) General Flow Relationship with Non-TNW:	
		Flow is: Pick List . Explain:	
		Surface flow is: Pick List	
		Characteristics: .	
		Subsurface flow: Pick List. Explain findings: .	
		Dye (or other) test performed:	
		(c) Wetland Adjacency Determination with Non-TNW:	
		Directly abutting	
		□ Not directly abutting	
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:	
		Separated by berm/barrier. Explain:	
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are Pick List river miles from TNW.	
		Project waters are Pick List aerial (straight) miles from TNW.	
		Flow is from: Pick List.	
		Estimate approximate location of wetland as within the Pick List floodplain.	
	(ii)	Chemical Characteristics:	
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed	
		characteristics; etc.). Explain: Identify specific pollutants, if known:	
			
	(111)	i) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):	
		Vegetation type/percent cover. Explain:	
		Habitat for:	
		Federally Listed species. Explain findings: .	
		☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:	
		Aquatic/wildlife diversity. Explain findings:	
_	~-		
3.	Cha	aracteristics of all wetlands adjacent to the tributary (if any)	
		All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that a	apply and provide siz	ze estimates in review area:	
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Scasonary.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:			
	Identify water body and summarize rationale supporting determination:				
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.			
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):			
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.			
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.			
SEC	CTIO	NIV: DATA SOURCES.			
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.			

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6291° N, Long112.6867° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS
A.	RHA SECTION 10 DETERMINATION OF JURISDICTION.
The	
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
rev:	iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
B.	iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
B.	iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain: CWA SECTION 404 DETERMINATION OF JURISDICTION.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

acres.

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 1 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

(i			gical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentration	ons		od sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. C	har	acter	ristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i)		(a) <u>(</u>	ical Characteristics: General Wetland Characteristics: Properties: Wetland size: Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
	(General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
		\$	Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
			Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
]]]	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(i	(Chara	nical Characteristics: acterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: ify specific pollutants, if known:
(iii)]	1 	gical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. C		All w	ristics of all wetlands adjacent to the tributary (if any) retland(s) being considered in the cumulative analysis: Pick List oximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide s	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Scasonary.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	from which	are or could be used by in which fish or shellfish are are or could be used for i ate isolated waters. Explanators. Explanators. Explain:	or could be taker ndustrial purpose	and sold in inte	rstate or foreig	gn commerce.		
	Identify w	ater body and summari	ze rationale sup	porting determi	nation:			
	Tributa Other r	timates for jurisdictional arry waters: linear for non-wetland waters: ntify type(s) of waters: ads: acres.			ıll that apply):			
F.	If pote Wetla Reviev F Water Other:	ential wetlands were asse nd Delineation Manual at w area included isolated variety to the Jan 2001 Supp Migratory Bird Rule" (Notes do not meet the "Signific (explain, if not covered)	ssed within the rend/or appropriate waters with no sureme Court decisions (BR). icant Nexus'' star above):	eview area, these Regional Supple bstantial nexus to on in "SWANCC andard, where suc	areas did not ements. o interstate (or C," the review h a finding is	meet the criteria in t r foreign) commerce area would have bee required for jurisdict	he 1987 Corps of Engine on regulated based solely tion. Explain:	on the
	factors (i.e. judgment (i.e. Non-v	reage estimates for non-ju ,, presence of migratory be check all that apply): wetland waters (i.e., rivers/ ponds: acres. non-wetland waters: nds: acres.	irds, presence of s, streams):		width (ft).			
	a finding is Non-v Lakes	reage estimates for non-just required for jurisdiction wetland waters (i.e., rivers/ponds: acres. non-wetland waters: nds: acres.	(check all that aps, streams):		width (ft).	ot meet the "Signific	ant Nexus" standard, who	ere such
SEC	CTION IV:	DATA SOURCES.						
A.	and request Maps, Data s Of Of Data s Corps U.S. C USDA Nation State/I FEMA 100-ya	ING DATA. Data revieted, appropriately referent plans, plots or plat submisheets prepared/submitted fice concurs with data shiftice does not concur with sheets prepared by the Conavigable waters' study: Geological Survey Hydromas SGS NHD data. SGS 8 and 12 digit HUC Geological Survey map(s) A Natural Resources Consult wetlands inventory much wetlands inventory much wetland inventory much signs and wetland inventory much signs wetland wetland inventory much signs wetland wetland inventory much signs wetland wetland wetland wetland wetland wetland wetland wetlan	ce sources below itted by or on be by or on behalf eets/delineation in data sheets/delinerps: logic Atlas: maps Cite scale & query servation Service ap(s). Cite name map(s): is: (Nation	half of the applicant/o	eant/consultant consultant. ies Daggs Tan ation:	: . k, Arizona.	in case file and, where c	hecked

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6247° N, Long112.6888° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
SE(A.	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
The revi	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

b. Identify (estimate) size of waters of the U.S. in the review area:

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentrat	tions	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

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 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6291° N, Long112.6929° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS
Α.	RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:						
	Tributary properties with respect to top of bank (estimate): Average width: 2 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).						
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:						
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %						
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:						
	Surface flow is: Discrete. Characteristics:						
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:						
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community						
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:						
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:						

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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□ Riparian corridor. □ Wetland fringe. Ch □ Habitat for: □ Federally Listed □ Fish/spawn area □ Other environm	ics. Channel supports (check all that apply): Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. haracteristics: I species. Explain findings: hs. Explain findings: hentally-sensitive species. Explain findings: he diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
	ter for mammals, birds, and reptiles, than surrounding upland areas.
2. Characteristics of wetlands	adjacent to non-TNW that flow directly or indirectly into TNW
(i) Physical Characteristic (a) General Wetland C Properties: Wetland size: Wetland type. Wetland quality Project wetlands cr	haracteristics: acres Explain: .
(b) <u>General Flow Relation</u> Flow is: <u>Pick List.</u>	cionship with Non-TNW: Explain:
Surface flow is: Pi o Characteristics:	k List
	ick List. Explain findings: er) test performed:
☐ Directly abuttin ☐ Not directly abu ☐ Discrete we ☐ Ecological	
Project waters are Flow is from: Pick	e Pick List river miles from TNW. Pick List aerial (straight) miles from TNW.
(ii) Chemical Characterist Characterize wetland syncharacteristics; etc. Identify specific pollutar	stem (e.g., water color is clear, brown, oil film on surface; water quality; general watershed). Explain:
Riparian buffer. Cl Vegetation type/per Habitat for: Federally Listed Fish/spawn area Other environm	ics. Wetland supports (check all that apply): naracteristics (type, average width): recent cover. Explain: I species. Explain findings: as. Explain findings: entally-sensitive species. Explain findings: e diversity. Explain findings:
All wetland(s) being cor	ads adjacent to the tributary (if any) sidered in the cumulative analysis: Pick List) acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that a	pply and provide size	estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
TO	
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	N IV: DATA SOURCES.
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SEO A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.627° N, Long112.6931° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

Wetlands:

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 2 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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(iv) Biological Characteristics. Channel supports (check all that apply): □ Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. □ Wetland fringe. Characteristics: □ Habitat for: □ Federally Listed species. Explain findings: □ Fish/spawn areas. Explain findings: □ Other environmentally-sensitive species. Explain findings: □ Other environmentally-sensitive species. Explain findings: □ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater concentrations of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
(b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
Surface flow is: Pick List Characteristics:
Subsurface flow: Pick List . Explain findings:
(c) Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
 (ii) Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Identify specific pollutants, if known:
(iii) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. Characteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	ljacent Wetlands.	Check all that a	apply and provide	size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Idei	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: . Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	wide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	N IV: DATA SOURCES.
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.626° N, Long112.6939° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
CWA SECTION 404 DETERMINATION OF JURISDICTION.
ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands:

Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 4 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	Biological Characteristics. Channel supports (check all that apply):
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		Other environmentally-sensitive species. Explain findings:
concentra	ations	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2	CI.	
2.	Cna	racteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Physical Characteristics:
		(a) General Wetland Characteristics: Proportion:
		Properties: Wetland size: acres
		Wetland type. Explain: .
		Wetland quality. Explain: .
		Project wetlands cross or serve as state boundaries. Explain:
		(b) General Flow Relationship with Non-TNW:
		Flow is: Pick List . Explain: .
		Surface flow is: Pick List
		Characteristics: .
		Subsurface flow: Pick List. Explain findings: .
		Dye (or other) test performed: .
		(c) Wetland Adjacency Determination with Non-TNW:
		Directly abutting
		□ Not directly abutting
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
		Separated by berm/barrier. Explain:
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are Pick List river miles from TNW.
		Project waters are Pick List aerial (straight) miles from TNW.
		Flow is from: Pick List.
		Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Chemical Characteristics:
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		characteristics; etc.). Explain: Identify specific pollutants, if known:
	(iii)	Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
		Vegetation type/percent cover. Explain:
		Habitat for:
		Federally Listed species. Explain findings:
		☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings: .
		☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:
3.	Cha	racteristics of all wetlands adjacent to the tributary (if any)
		All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.
		reproximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	ljacent Wetlands.	Check all that a	apply and provide siz	e estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	GRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6245° N, Long112.6969° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam.
	Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 1 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 5 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	Biological Characteristics. Channel supports (check all that apply):	
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:	
		Habitat for:	
		Federally Listed species. Explain findings:	
		Fish/spawn areas. Explain findings:	
		Other environmentally-sensitive species. Explain findings:	
concentra	ations	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater s of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.	
2	Cha	TNYV that flow dead and a discount to many things the flow discount of t	
2.	Cna	aracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW	
	(i)	Physical Characteristics:	
		(a) General Wetland Characteristics: Proportion:	
		Properties: Wetland size: acres	
		Wetland type. Explain: .	
		Wetland quality. Explain: .	
		Project wetlands cross or serve as state boundaries. Explain:	
		(b) General Flow Relationship with Non-TNW:	
		Flow is: Pick List. Explain:	
		Surface flow is: Pick List	
		Characteristics: .	
		Subsurface flow: Pick List. Explain findings: .	
		Dye (or other) test performed: .	
		(c) Wetland Adjacency Determination with Non-TNW:	
		Directly abutting	
		□ Not directly abutting	
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:	
		Separated by berm/barrier. Explain:	
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are Pick List river miles from TNW.	
		Project waters are Pick List aerial (straight) miles from TNW.	
		Flow is from: Pick List.	
		Estimate approximate location of wetland as within the Pick List floodplain.	
	(ii)	Chemical Characteristics:	
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed	
		characteristics; etc.). Explain: Identify specific pollutants, if known:	
			
	(iii)) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):	
		Vegetation type/percent cover. Explain:	
		Habitat for:	
		Federally Listed species. Explain findings:	
		☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:	
		Aquatic/wildlife diversity. Explain findings:	
3.	Cha	aracteristics of all wetlands adjacent to the tributary (if any)	
		All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.	
		pproximation () acres in total are being considered in the cumulative analysis.	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Adjac	ent Wetlands.	Check all that apply	and provide size	estimates in review area	:
	TNWs: 1	inear feet	width (ft), Or,	acres.		
	Wetlands adjac	ent to TNWs:	acres.			

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: .
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	Impoundments of jurisdictional waters. As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
	\boxtimes	U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6272° N, Long112.699° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam.
	Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

acres.

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:					
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).					
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:					
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %					
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:					
	Surface flow is: Discrete. Characteristics:					
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:					
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community					
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.					
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:					

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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(iv) Biological Characteristics. Channel supports (check all that apply): □ Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. □ Wetland fringe. Characteristics: □ Habitat for: □ Federally Listed species. Explain findings: □ Fish/spawn areas. Explain findings: □ Other environmentally-sensitive species. Explain findings: □ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater concentrations of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.	
2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW	
(i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:	
(b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:	
Surface flow is: Pick List Characteristics: .	
Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:	
(c) Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:	
(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.	
 (ii) Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Identify specific pollutants, if known: 	
(iii) Biological Characteristics. Wetland supports (check all that apply): □ Riparian buffer. Characteristics (type, average width): □ Vegetation type/percent cover. Explain: □ Habitat for: □ Federally Listed species. Explain findings: □ Fish/spawn areas. Explain findings: □ Other environmentally-sensitive species. Explain findings: □ Aquatic/wildlife diversity. Explain findings:	
3. Characteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	ljacent Wetlands.	Check all that a	apply and provide siz	e estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): ¹⁰

E.

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	wide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
<u>SE</u>	CTIO	N IV: DATA SOURCES.
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6321° N, Long112.7027° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 1 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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	(iv)	Biological Characteristics. Channel supports (check all that apply):
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		Other environmentally-sensitive species. Explain findings:
concentra	ations	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2	Cho	postoristics of wotlands adjacent to non TNW that flow directly an indirectly into TNW
2.	Clia	racteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Physical Characteristics:
		(a) General Wetland Characteristics: Properties:
		Wetland size: acres
		Wetland type. Explain: .
		Wetland quality. Explain: .
		Project wetlands cross or serve as state boundaries. Explain:
		(b) General Flow Relationship with Non-TNW:
		Flow is: Pick List . Explain: .
		Surface flow is: Pick List
		Characteristics: .
		Subsurface flow: Pick List. Explain findings: .
		Dye (or other) test performed: .
		(c) Wetland Adjacency Determination with Non-TNW:
		☐ Directly abutting
		□ Not directly abutting
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
		Separated by berm/barrier. Explain:
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are <u>Pick List</u> river miles from TNW.
		Project waters are Pick List aerial (straight) miles from TNW.
		Flow is from: Pick List.
		Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Chemical Characteristics:
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		characteristics; etc.). Explain: Identify specific pollutants, if known:
	(iii)	Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
		Vegetation type/percent cover. Explain:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:
		<u> </u>
3.	Cha	racteristics of all wetlands adjacent to the tributary (if any)
		All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.
		Approximately () acres in total are being considered in the cumulative allarysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	ljacent Wetlands.	Check all that	apply and provide s	ize estimates in review area	ı:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	 RPWs that flow directly or indirectly into TNWs. ☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: ☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows
	seasonally: .
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Iden	tify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	factoriudg	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
<u>SE</u>	CTIO	N IV: DATA SOURCES.
A.		CORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

<u>SЕ</u> (CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6319° N, Long112.7043° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	we are a. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1	1	Т	N	X/
			14	vv

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 3 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 2 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Cobbles Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	tions	of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and A	djacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands a	djacent to TNWs:	acres.	

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

<u>SЕ</u> (CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6269° N, Long112.7056° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 ☐ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. ☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Cobbles Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		logical Characteristics. Channel supports (check all that apply):
			Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		\boxtimes	Habitat for:
			Federally Listed species. Explain findings:
			☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	ations	s of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
	CI.		
2.	Cha	aract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Phy	sical Characteristics:
		(a)	General Wetland Characteristics:
			Properties: Wetland size: acres
			Wetland size: acres Wetland type. Explain: .
			Wetland quality. Explain: .
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW:
		(0)	Flow is: Pick List. Explain:
			Surface flow is: Pick List
			Characteristics:
			Subsurface flow: Pick List . Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW:
			☐ Directly abutting ☐ Not directly abutting
			Discrete wetland hydrologic connection. Explain:
			☐ Ecological connection. Explain:
			Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW
			Project wetlands are Pick List river miles from TNW.
			Project waters are Pick List aerial (straight) miles from TNW.
			Flow is from: Pick List . Estimate approximate location of wetland as within the Pick List floodplain.
			Estimate approximate location of wettand as within the Tex List moodplain.
	(ii)		emical Characteristics:
		Cna	racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:
		Ider	ntify specific pollutants, if known:
	(***)	\ D *.1	Land Character Widow Language (Andrew Male and Andrew Language (Andrew Male and Andrew Language (Andrew Lang
	(111)) B101	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
		Ħ	Vegetation type/percent cover. Explain:
			Habitat for:
			Federally Listed species. Explain findings:
			☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings:
			Aquatic/wildlife diversity. Explain findings:
	_		
3.	Cha		eristics of all wetlands adjacent to the tributary (if any)
			wetland(s) being considered in the cumulative analysis: Pick List proximately () acres in total are being considered in the cumulative analysis.
		, Th	nonlineary () acres in total are coming considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	ljacent Wetlands.	Check all that a	apply and provide siz	e estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
TO	OI ATEN HINTEDOTATE OD INTDA CTATELWATEDO INCLUDING ICOLATEN WETLANDO THE LIGE
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
]	dentify water body and summarize rationale supporting determination:
]	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: . Wetlands: acres.
	MON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above): Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional udgment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
SEC	TION IV: DATA SOURCES.
A. S	UPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS NHD data. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6377° N, Long112.7107° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS
Α.	RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

Wetlands:

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 3 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:						
	Tributary properties with respect to top of bank (estimate): Average width: 7 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).						
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck						
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %						
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:						
	Surface flow is: Discrete. Characteristics:						
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:						
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community						
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:						
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:						

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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	(iv)	Biological Characteristics. Channel supports (check all that apply):
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	ations	of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
	~	
2.	Cha	racteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Physical Characteristics:
		(a) General Wetland Characteristics:
		Properties: Wetland size: acres
		Wetland type. Explain: .
		Wetland quality. Explain: .
		Project wetlands cross or serve as state boundaries. Explain: .
		(b) General Flow Relationship with Non-TNW:
		Flow is: Pick List. Explain:
		Surface flow is: Pick List
		Characteristics: .
		Subsurface flow: Pick List. Explain findings: .
		Dye (or other) test performed: .
		(c) Wetland Adjacency Determination with Non-TNW:
		Directly abutting
		□ Not directly abutting
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
		Separated by berm/barrier. Explain: .
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are <u>Pick List</u> river miles from TNW.
		Project waters are Pick List aerial (straight) miles from TNW.
		Flow is from: Pick List.
		Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Chemical Characteristics:
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		characteristics; etc.). Explain: Identify specific pollutants, if known:
		identity specific pollutants, it known:
	(iii)	Biological Characteristics. Wetland supports (check all that apply):
		Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		Other environmentally-sensitive species. Explain findings:
		Aquatic/wildlife diversity. Explain findings: .
3.	Cha	racteristics of all wetlands adjacent to the tributary (if any)
		All wetland(s) being considered in the cumulative analysis: Pick List
		Approximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Adja	acent Wetlands.	Check all that apply	and provide size estimates in review are:	a:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands adj	acent to TNWs:	acres.		

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	entify water body and summarize rationale supporting determination:
	ovide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.	ON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	ovide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ctors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional dgment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	ovide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such inding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
<u>SE</u>	ON IV: DATA SOURCES.
A.	PPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked d requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
Α.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6353° N, Long112.7114° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
SEO	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters

c. Limits (boundaries) of jurisdiction based on: Pick List

Non-regulated waters/wetlands (check if applicable):³

Elevation of established OHWM (if known):

b. Identify (estimate) size of waters of the U.S. in the review area:

linear feet:

Isolated (interstate or intrastate) waters, including isolated wetlands

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			13	1	v	1

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: .5 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 1 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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(ir		Biological Characteristics. Channel supports (check all that apply): ☐ Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. ☐ Wetland fringe. Characteristics: ☐ Habitat for: ☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater	
concentratio	ns c	of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.	
2. C	hara	acteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW	
(i)		Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:	
	((b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:	
		Surface flow is: Pick List Characteristics:	
		Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:	
	(Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:	
	(Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.	
(ii	(Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Identify specific pollutants, if known:	
(i	iii) I [] [Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:	
3. C	A	acteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	apply and provide si	ize estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	seasonany.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres.
	Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale
	indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	Impoundments of jurisdictional waters. As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Idei	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.	NOI	N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.
		Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: ☐ USGS NHD data. ☐ USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date):	
Previous determination(s). File no. and date of response let	tter: .
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.625° N. Long112.7115° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880**square miles**Drainage area: 2 **square miles**Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 5 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: $\overline{\text{No}}$. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. \square Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: bed and banks the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics tidal gauges other (list):
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. atify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

	(iv)		ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	ations	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	-	sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain:
			Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: racterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ac	ljacent Wetlands.	Check all that ap	oply and provide	size estimates in review are	ea:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
IC/	OI ATED HNTEDSTATE OD INTDA STATELWATEDS INCLUDING 1901 ATED WETLANDS THE LISE
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State:AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6297° N, Long112.7119° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 2 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 4 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	mical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	\square	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		X	Habitat for: ☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentr	ation	s of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Phy	vsical Characteristics:
			General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: uracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: ntify specific pollutants, if known:
	(iii	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	pply and provide	size estimates in review area	:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
TO	
	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
		vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	<u>CTIO</u>	N IV: DATA SOURCES.
A.		PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6275° N, Long112.7117° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS
Α.	RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the lew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

		w

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 2 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 6 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:				
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).				
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:				
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %				
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:				
	Surface flow is: Discrete. Characteristics:				
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:				
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community				
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.				
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:				

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	\square	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		X	Habitat for: ☐ Federally Listed species. Explain findings: ☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentr	ation	s of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Phy	vsical Characteristics:
	(-)		General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: artify specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List proximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands ad	ljacent to TNWs:	acres.	

2.	 □ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: □ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:				
	Identify water body and summarize rationale supporting determination:					
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.				
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):				
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.				
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.				
SEC	CTIO	NIV: DATA SOURCES.				
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.				

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SEO A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6250° N, Long112.7115° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			13	1	v	1

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 1 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 3 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: ☐ Natural ☐ Artificial (man-made). Explain: ☐ Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 5 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: bed and banks the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. https://doi.org/10.1001/j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.j.

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(i			ogical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentration	ons	of fo	and sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2. 0	hai	racte	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
(i			sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: □ Directly abutting □ Not directly abutting □ Discrete wetland hydrologic connection. Explain: □ Ecological connection. Explain: □ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
(i		Char	mical Characteristics: cacterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: tify specific pollutants, if known:
((iii)		ogical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3. C		All v	veristics of all wetlands adjacent to the tributary (if any) wetland(s) being considered in the cumulative analysis: Pick List roximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and A	ljacent Wetlands.	Check all that a	apply and provide s	size estimates in review a	rea:
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands a	djacent to TNWs:	acres.			

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
ISO	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY): 10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:				
	Identify water body and summarize rationale supporting determination:					
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.				
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):				
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.				
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.				
SEC	<u>CTIO</u>	NIV: DATA SOURCES.				
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.				

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6297° N, Long112.7119° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	h Identify (estimate) size of waters of the U.S. in the review area:

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

acres.

Non-regulated waters/wetlands (check if applicable):³

linear feet: width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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			13	1	v	1

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 1 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 3 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Gravel Bedrock Vegetation. Type/% cover: Other. Explain: Check all that apply): Muck
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)		logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater
concentra	ations	s of fo	ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Sical Characteristics: General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain:
			Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: cracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: chify specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that a	apply and provide siz	e estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.	
	Wetlands a	djacent to TNWs:	acres.		

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).

	OLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, CRADATION OR DESTRUCTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE, INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY): 10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTIO	NIV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SEC A.	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6275° N, Long112.7117° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
SEC A.	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

b. Identify (estimate) size of waters of the U.S. in the review area:

linear feet:

width (ft) and/or 0 acres.

Non-wetland waters:

Wetlands:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 1 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 3 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: Oil or scum line along shore objects Fine shell or debris deposits (foreshore) Physical markings/characteristics Other (list): Mean High Water Mark indicated by: Survey to available datum; Physical markings; Vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

	(iv)	Biological Characteristics. Channel supports (check all that apply):
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		Other environmentally-sensitive species. Explain findings:
concentra	ations	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2	Cha	weekenisties of weeken de a die oort to week TNNN sheet floor die ooks on in die ooks in to TNNN
2.	Cna	racteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)	Physical Characteristics:
		(a) General Wetland Characteristics: Proportion:
		Properties: Wetland size: acres
		Wetland type. Explain: .
		Wetland quality. Explain: .
		Project wetlands cross or serve as state boundaries. Explain:
		(b) General Flow Relationship with Non-TNW:
		Flow is: Pick List . Explain: .
		Surface flow is: Pick List
		Characteristics: .
		Subsurface flow: Pick List. Explain findings: .
		Dye (or other) test performed: .
		(c) Wetland Adjacency Determination with Non-TNW:
		☐ Directly abutting
		□ Not directly abutting
		☐ Discrete wetland hydrologic connection. Explain: ☐ Ecological connection. Explain:
		Separated by berm/barrier. Explain:
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are <u>Pick List</u> river miles from TNW.
		Project waters are Pick List aerial (straight) miles from TNW.
		Flow is from: Pick List.
		Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Chemical Characteristics:
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed
		characteristics; etc.). Explain: Identify specific pollutants, if known:
	(***)	
	(iii)	Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):
		Vegetation type/percent cover. Explain:
		Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas. Explain findings:
		☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:
	_	<u> </u>
3.	Cha	racteristics of all wetlands adjacent to the tributary (if any)
		All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.
		reproximately () acros in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	jacent Wetlands.	Check all that a	apply and provide	size estimates in review area:	
	TNWs:	linear feet	width (ft), Or,	acres.		
	Wetlands ad	ljacent to TNWs:	acres.			

2.	 RPWs that flow directly or indirectly into TNWs. Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	seasonary.
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:			
	Identify water body and summarize rationale supporting determination:			
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.		
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):		
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.		
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.		
SEC	CTIO	NIV: DATA SOURCES.		
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.		

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM **U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	CTION I: BACKGROUND INFORMATION REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6303° N, Long112.7119° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS BHA SECTION 10 DETERMINATION OF HIRISDICTION
Α.	RHA SECTION 10 DETERMINATION OF JURISDICTION.
	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	re Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters ² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or 0 acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

acres.

Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

Wetlands:

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 1 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

Tributary flows directly into TNW.

☐ Tributary flows through 3 tributaries before entering TNW.

Project waters are 25-30 river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries >Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:					
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).					
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:					
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %					
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:					
	Surface flow is: Discrete. Characteristics:					
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Dye (or other) test performed:					
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community					
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics tidal gauges other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.					
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:					

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

Tibid.

(iv) Biological Characteristics. Channel supports (check all that apply): □ Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. □ Wetland fringe. Characteristics: □ Habitat for: □ Federally Listed species. Explain findings: □ Fish/spawn areas. Explain findings: □ Other environmentally-sensitive species. Explain findings: □ Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater	
concentrations of food sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.	
2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW	
(i) Physical Characteristics: (a) General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:	
(b) General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:	
Surface flow is: Pick List Characteristics:	
Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:	
(c) Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:	
(d) Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.	
 (ii) Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: Identify specific pollutants, if known: 	
(iii) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:	
3. Characteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List Approximately () acres in total are being considered in the cumulative analysis.	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

l.	TNWs and A	djacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	■ Wetlands	adjacent to TNWs:	acres.	

2.	Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
	☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	■ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
IC/	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE,
	CRADATION OR DESTRICTION OF WHICH COLL DAFFECT INTERSTATE COMMERCE INCLUDING ANY

E.

SUCH WATERS (CHECK ALL THAT APPLY):10

⁸See Footnote # 3.
⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

	which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:					
	Identify water body and summarize rationale supporting determination:					
		ride estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.				
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):				
	facto	ride acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.				
	a fin	ride acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.				
SEC	CTIO	NIV: DATA SOURCES.				
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.				

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SE	CTION I: BACKGROUND INFORMATION
A.	REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6272° N, Long112.7125° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) İnto which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): Office (Desk) Determination. Date: September 30, 2015 Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are no "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

b. Identify (estimate) size of waters of the U.S. in the review area:

Impoundments of jurisdictional waters

Non-wetland waters: linear feet: width (ft) and/or 0 acres. Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Pick List

Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable):³

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Isolated (interstate or intrastate) waters, including isolated wetlands

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: OHWM indicators present, but does not to have a significant nexus to TNW, based on: distance to TNW, ephemeral miles between the feature and TNW, low precipitation and frequency of flow; rapid dissipation through high evaporation and infiltration. Biological/Chemical contributions to TNW are virtually unmeasurable.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

4	FETS TWW
Ι.	INW

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles
Drainage area: 1 square miles
Average annual rainfall: 7 inches
Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 3 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries >Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 3 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting multiple observed or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics tidal gauges other (list):
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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	(iv)	\square	logical Characteristics. Channel supports (check all that apply): Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings:
concentra	ations	of fo	Aquatic/wildlife diversity. Explain findings: Ephemeral riparian corridors typically provide somewhat greater ood sources and shelter for mammals, birds, and reptiles, than surrounding upland areas.
2.	Cha	ract	eristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		General Wetland Characteristics: Properties: Wetland size: acres Wetland type. Explain: Wetland quality. Explain: Project wetlands cross or serve as state boundaries. Explain:
		(b)	General Flow Relationship with Non-TNW: Flow is: Pick List. Explain:
			Surface flow is: Pick List Characteristics:
			Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: Directly abutting Not directly abutting Discrete wetland hydrologic connection. Explain: Ecological connection. Explain: Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are Pick List river miles from TNW. Project waters are Pick List aerial (straight) miles from TNW. Flow is from: Pick List. Estimate approximate location of wetland as within the Pick List floodplain.
	(ii)	Cha	emical Characteristics: tracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: titify specific pollutants, if known:
	(iii)	Biol	logical Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:
3.	Cha	All	wetland(s) being considered in the cumulative analysis: Pick List broximately () acres in total are being considered in the cumulative analysis.

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands a	djacent to TNWs:	acres.	

2.	 Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters:
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY): 10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

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 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos.$

or Other (Name & Date): .	
Previous determination(s). File no. and date of response letter:	
Applicable/supporting case law: .	
Applicable/supporting scientific literature: .	
Other information (please specify):	

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.

APPROVED JURISDICTIONAL DETERMINATION FORM U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

	<u>CTION I: BACKGROUND INFORMATION</u> REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): September 30, 2015
В.	DISTRICT OFFICE, FILE NAME, AND NUMBER: SPL-2007-737
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: AZ County/parish/borough: Maricopa City: Buckeye Center coordinates of site (lat/long in degree decimal format): Lat. 33.6358° N, Long112.6899° W. Universal Transverse Mercator: Name of nearest waterbody: Wagner Wash
	Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River between Powers Butte and Gillesspie Dam. Name of watershed or Hydrologic Unit Code (HUC): 150701030503 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request. Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
D.	REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY): ☐ Office (Desk) Determination. Date: September 30, 2015 ☐ Field Determination. Date(s):
	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the iew area. [Required] Waters subject to the ebb and flow of the tide. Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere Are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]
	1. Waters of the U.S. a. Indicate presence of waters of U.S. in review area (check all that apply): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet: width (ft) and/or .577 acres. Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Pick List Elevation of established OHWM (if known):

Non-regulated waters/wetlands (check if applicable):³

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

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Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. Characteristics of non-TNWs that flow directly or indirectly into TNW

(i) General Area Conditions:

Watershed size: 49,880 square miles Drainage area: 11 square miles Average annual rainfall: 7 inches Average annual snowfall: 0 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☐ Tributary flows through 2 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 25-30 river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 20-25 aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵: Unnamed Tributaries > Wagner Wash > Hassayampa River > Gila River (RPW) > TNW. Tributary stream order, if known: 1.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

	(b) General Tributary Characteristics (check all that apply): Tributary is: Natural Artificial (man-made). Explain: Manipulated (man-altered). Explain:
	Tributary properties with respect to top of bank (estimate): Average width: 79 feet Average depth: 0.5 feet Average side slopes: 4:1 (or greater).
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Stable, poorly defined channel. Presence of run/riffle/pool complexes. Explain: None observed. Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
event (>0.01	Flow: Tributary provides for: Ephemeral flow Estimate average number of flow events in review area/year: 20 (or greater) Describe flow regime: Dependent on measurable precipitation events; assuming every measurable precipitation inches) resulted in flow through the Project Area, precipitation data suggest that flow occurs at most on average of 30 days e Project Area. Other information on duration and volume:
	Surface flow is: Discrete. Characteristics:
	Subsurface flow: No. Explain findings: groundwater is deep in the alluvium and these are only ephemeral channels. Due (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil shelving vegetation matted down, bent, or absent leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. Explain: the presence of litter and debris destruction of terrestrial vegetation the presence of wrack line sediment sorting sediment sorting sediment or predicted flow events abrupt change in plant community
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply): High Tide Line indicated by: oil or scum line along shore objects fine shell or debris deposits (foreshore) physical markings/characteristics physical markings/characteristics other (list): Mean High Water Mark indicated by: survey to available datum; physical markings; vegetation lines/changes in vegetation types.
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). Explain: Ephemeral; tributaries are dry and show no evidence of abmormal conditions. tify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

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	(iv)	Biological Characteristics. Channel supports (check all that apply):	
		Riparian corridor. Characteristics (type, average width): xeroriparian, 0-5 feet wide on either side. Wetland fringe. Characteristics:	
		Habitat for:	
		Federally Listed species. Explain findings:	
		Fish/spawn areas. Explain findings:	
		Other environmentally-sensitive species. Explain findings:	
concentra	ations		
2	Cha	TAXAL OF TOTAL AND A STORMAN AS TO TAXAL OF TAXAL OF TAXAL OF TAXAL	
2.	Cna	aracteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW	
	(i)	Physical Characteristics:	
		(a) General Wetland Characteristics: Proportion:	
		Properties: Wetland size: acres	
		Wetland type. Explain: .	
		Wetland quality. Explain: .	
		Project wetlands cross or serve as state boundaries. Explain:	
		(b) General Flow Relationship with Non-TNW:	
		Flow is: Pick List. Explain:	
		Surface flow is: Pick List	
		Characteristics: .	
		Subsurface flow: Pick List. Explain findings: .	
		Dye (or other) test performed: .	
		(c) Wetland Adjacency Determination with Non-TNW:	
		Directly abutting	
		☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain:	
		Ecological connection. Explain:	
		Separated by berm/barrier. Explain:	
		(d) Provimity (Palationship) to TNW	
		(d) <u>Proximity (Relationship) to TNW</u> Project wetlands are <u>Pick List</u> river miles from TNW.	
		Project waters are Pick List aerial (straight) miles from TNW.	
		Flow is from: Pick List.	
		Estimate approximate location of wetland as within the Pick List floodplain.	
	(ii)	Chemical Characteristics:	
		Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed	
		characteristics; etc.). Explain: Identify specific pollutants, if known:	
	(:::)	Piclorical Characteristics Wetland comparts (check all that apply)	
	(III)) Biological Characteristics. Wetland supports (check all that apply): Riparian buffer. Characteristics (type, average width):	
		Vegetation type/percent cover. Explain:	
		Habitat for:	
		Federally Listed species. Explain findings:	
		☐ Fish/spawn areas. Explain findings: ☐ Other environmentally-sensitive species. Explain findings: .	
		Aquatic/wildlife diversity. Explain findings:	
2	Cha	programical of all westlands adjacent to the tributery (if any)	
3.	Cna	aracteristics of all wetlands adjacent to the tributary (if any) All wetland(s) being considered in the cumulative analysis: Pick List	
		Approximately () acres in total are being considered in the cumulative analysis.	

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Because of the small watershed size, low frequency and flow volume of the washes found in the Project Area, it is unlikely that typical flows from average precipitation events reach the Gila River between Powers Butte and Gillespie Dam. Extreme events such as a 24-hour 100-year flow may contribute to the Gila River, but this is extremely unlikely. Furthermore, the elevated levels of salinity and comparatively low water quality in the Salt and Gila rivers suggest that the drainage's ability to significantly affect those conditions are extremely unlikely. The Project Area's distance and habitat and flow path characteristics significantly reduce the likelihood of a biological nexus between the project area and the TNW reach. The frequency of events in the project area that would contribute to the movement of nutrient-containing materials from the watershed to downstream waters is rare. More frequent, smaller flow events would act to redistribute organic matter, nutrients, and debris in the project area. Thus it is determined this drainage and other drainages in the Sun Valley project area do not have more than a speculative effect on the physical, chemical and biological integrity of the nearest downstream TNW, and are not waters of the U.S.
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D.	DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL
	THAT APPLY):

1.	TNWs and Ad	ljacent Wetlands.	Check all that apply	and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands a	djacent to TNWs:	acres.	

2.	 RPWs that flow directly or indirectly into TNWs. □ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: □ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:
	Provide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet25133width (ft). Other non-wetland waters: acres. Identify type(s) of waters: .
4.	Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands. Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW:
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).
DE	DLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, GRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY CH WATERS (CHECK ALL THAT APPLY):10

E.

 $^{^8} See$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

		which are or could be used by interstate or foreign travelers for recreational or other purposes. from which fish or shellfish are or could be taken and sold in interstate or foreign commerce. which are or could be used for industrial purposes by industries in interstate commerce. Interstate isolated waters. Explain: Other factors. Explain:
	Ider	ntify water body and summarize rationale supporting determination:
		vide estimates for jurisdictional waters in the review area (check all that apply): Tributary waters: linear feet width (ft). Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: acres.
F.		N-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements. Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce. Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR). Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: Other: (explain, if not covered above):
	facto	vide acreage estimates for non-jurisdictional waters in the review area, where the <u>sole</u> potential basis of jurisdiction is the MBR ors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional ment (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
	a fin	vide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such ding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SE	<u>CTIO</u>	N IV: DATA SOURCES.
	SUPI	PORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked requested, appropriately reference sources below): Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Data sheets prepared/submitted by or on behalf of the applicant/consultant. Office concurs with data sheets/delineation report. Office does not concur with data sheets/delineation report. Data sheets prepared by the Corps: Corps navigable waters' study: U.S. Geological Survey Hydrologic Atlas: USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name:7.5 Series Daggs Tank, Arizona. USDA Natural Resources Conservation Service Soil Survey. Citation: National wetlands inventory map(s). Cite name: State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date):Google Earth, May 26, 2013.

 $^{^{10}}$ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA $\it Memorandum~Regarding~CWA~Act~Jurisdiction~Following~Rapanos$.

	or Other (Name & Date):
\boxtimes	Previous determination(s). File no. and date of response letter:2007-737-RWF, May 28, 2008.
	Applicable/supporting case law: .
	Applicable/supporting scientific literature: .
	Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD: See the Attached Significant Nexus Report for supporting information and discussion.