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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.160899 ºN, Long. -111.663144 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 1-1 flows to AJD 2-1. AJD 2-1 flows to AJD 3-4. AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

NOT APPLICABLE

- Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

- Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Flow is from: Choose an item.
Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.
Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 24,817 linear feet 8 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.200096 ºN, Long. -111.680353 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 1-2 flows to AJD 1-1. AJD 1-1 flows to AJD 2-1. AJD 2-1 flows to AJD 3-4. AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~**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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 1,773 linear feet 5 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.188757 ºN, Long. -111.678040 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 1-3 flows to AJD 1-1. AJD 1-1 flows to AJD 2-1. AJD 2-1 flows to AJD 3-4. AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~**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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 715 linear feet 6 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.156424 ºN, Long. -111.664337 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 1-4 flows to AJD 1-1. AJD 1-1 flows to AJD 2-1. AJD 2-1 flows to AJD 3-4. AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~**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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 1,102 linear feet 11 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.178425 ºN, Long. -111.683018 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 1-5 flows to AJD 1-1. AJD 1-1 flows to AJD 2-1. AJD 2-1 flows to AJD 3-4. AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~**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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 2913 linear feet 8 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.173825 ºN, Long. -111.679177 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 1-6 flows to AJD 1-7 and AJD 1-8. AJD 1-7 and AJD 1-8 flow to AJD 1-1. AJD 1-1 flows to AJD 2-1. AJD 2-1 flows to AJD 3-4. AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 2357 linear feet 7 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.181226 ºN, Long. -111.679584 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 1-7 flows to AJD 1-1. AJD 1-1 flows to AJD 2-1. AJD 2-1 flows to AJD 3-4. AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

NOT APPLICABLE

- Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

- Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Flow is from: Choose an item.
Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.
Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~**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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 942 linear feet 3 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.199641 ºN, Long. -111.682840 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 1-8 flows to AJD 1-1. AJD 1-1 flows to AJD 2-1. AJD 2-1 flows to AJD 3-4. AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 784 linear feet 6 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.169608 ºN, Long. -111.676568 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 1-9 flows to AJD 1-1. AJD 1-1 flows to AJD 2-1. AJD 2-1 flows to AJD 3-4. AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~**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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 1748 linear feet 18 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.160407 ºN, Long. -111.666586 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 1-10 flows to AJD 1-1. AJD 1-1 flows to AJD 2-1. AJD 2-1 flow
3-4. AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during
and 10-year storm events. Flow does not continue to the EMF or Gila
(TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~**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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 1171 linear feet 4 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.157877 ºN, Long. -111.661365 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 1-11 flows to AJD 2-1. AJD 2-1 flows to AJD 3-4. AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~**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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 747 linear feet 6 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.152127 ºN, Long. -111.665218 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 1-12 flows to AJD 1-14. AJD 1-14 flows to AJD 2-1. AJD 2-1 flows to AJD 3-4. AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:
- Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.
- Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Flow is from: Choose an item.
Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.
Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~1. TNWs and Adjacent Wetlands.~~ ~~Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 1300 linear feet 4 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.151446 ºN, Long. -111.663061 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 1-12A flows to AJD 2-1. AJD 2-1 flows to AJD 3-4. AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~**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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 270 linear feet 5 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.175848 ºN, Long. -111.680578 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 1-13 flows to AJD 1-12. AJD 1-12 flows to AJD 1-14. AJD 1-14 flows to AJD 2-1. AJD 2-1 flows to AJD 3-4. AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~1. TNWs and Adjacent Wetlands.~~ ~~Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 387 linear feet 4 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.171965 ºN, Long. -111.678793 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 1-14 flows to AJD 2-1. AJD 2-1 flows to AJD 3-4. AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~**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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 4711 linear feet 6 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.176357 ºN, Long. -111.681788 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 1-15 flows to AJD 1-14. AJD 1-14 flows to AJD 2-1. AJD 2-1 flows to AJD 3-4. AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~**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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 328 linear feet 6 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.162842 ºN, Long. -111.660460 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 1-16 flows to AJD 1-14. AJD 1-14 flows to AJD 2-1. AJD 2-1 flows to AJD 3-4. AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~**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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 4589 linear feet 6 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.170137 ºN, Long. -111.664654 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 1-17 flows to AJD 1-1. AJD 1-1 flows to AJD 2-1. AJD 2-1 flows to AJD 3-4. AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~**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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 6688 linear feet 9 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.185211 ºN, Long. -111.674657 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 1-18 flows to AJD 1-17. AJD 1-17 flows to AJD 1-1. AJD 1-1 flows to AJD 2-1. AJD 2-1 flows to AJD 3-4. AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~**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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 331 linear feet 5 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.171752 ºN, Long. -111.665985 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 2-1 flows to AJD 3-4. AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~**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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 2439 linear feet 32 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.158897 ºN, Long. -111.666645 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 2-2 flows to AJD 2-1. AJD 2-1 flows to AJD 3-4. AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~**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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 507 linear feet 8 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.151512 ºN, Long. -111.662066 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 3-1 flows to AJD 3-3. AJD 3-3 flows to AJD 3-9. AJD 3-9 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 5802 linear feet 6 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.156419 ºN, Long. -111.663264 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

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

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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: 6,000 square miles (Middle Gila Watershed)
Drainage area: 5.9 square miles (Box Canyon project area)
Average annual rainfall: 10 inches
Average annual snowfall: N/A

[3] Supporting documentation is presented in Section III.F.
[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid west.

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☒ Tributary flows through 4 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 30 (or more) aerial (straight) miles from TNW.
Project waters are 30 (or more) aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: N/A

Identify flow route to TNW[5]: AJD 3-1A flows into AJD 3-10. AJD 3-10 flows offsite into the channel south of the farmer's dike. The farmer's dike channel flows to the EMF (4 miles) and the EMF flows to the Gila River (9 miles). The Gila River flows 70 miles to the Gila River at Powers Butte (TNW).
Tributary stream order, if known:

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☒ Natural

☐ Artificial (man-made). Explain:

☒ Manipulated (man-altered). Explain: AJD 3-1A is a natural wash until it intersections a former dirt road. The dirt road now carries all the flow for AJD 3-1A.

Tributary properties with respect to top of bank (estimate):
Average width: 4 feet
Average depth: varies 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: Varies- highly eroding to gentle slopes
Presence of run/riffle/pool complexes. Explain: N/A
Tributary geometry: Relatively straight
Tributary gradient (approximate average slope): ~1 %

(c) Flow:

Tributary provides for: Ephemeral flow
Estimate average number of flow events in review area/year: 6-10
Describe flow regime: N/A
Other information on duration and volume: N/A

Surface flow is: Discrete and confined Characteristics: N/A

Subsurface flow: Unknown Explain findings: N/A
☐ Dye (or other) test performed: N/A

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☒ the presence of litter and debris
☒ changes in the character of soil	☐ destruction of terrestrial vegetation
☒ shelving	☐ the presence of wrack line
☒ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☒ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community

[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.
[6] A 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.

☐ other (list):

☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain: N/A

Identify specific pollutants, if known: N/A

(iv) Biological Characteristics. Channel supports (check all that apply):

☒ Riparian corridor. Characteristics (type, average width): Xeroriparian, 4' average

☐ Wetland fringe. Characteristics:

☐ Habitat for:

☐ Federally Listed species. Explain findings:

☐ Fish/spawn areas. Explain findings:

☒ Other environmentally-sensitive species. Explain findings: Could provide habitat dispersal habitat for Sonoran Desert Tortoise (*Gopherus morfkai*) and Tucson shovel-nosed snake (*Chionactis occipitalis klauberi*)

☒ Aquatic/wildlife diversity. Explain findings: Wildlife diversity is similar to that found in most ephemeral washes

~~**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**~~

~~**(i) Physical Characteristics:**~~

~~(a) General Wetland Characteristics:~~ NOT APPLICABLE

~~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: . Explain:~~

~~Surface flow is:~~

~~Characteristics:~~

~~Subsurfae flow: . Explain findings:~~

~~☐ Dye (or other) test perfomed:~~

~~(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 river miles from TNW.~~

~~Project waters are aerial (straight) miles from TNW.~~

~~Flow is from:~~

~~Estimate approximate location of wetland as within the 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:~~

[7] Ibid.

~~☐ 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:~~
~~Approximately ( ) acres in total are being considered in the cumulative analysis.~~

~~For each wetland, specify the following:~~
~~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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and 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.

NOT APPLICABLE

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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication 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 jurisdictional. 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.[9]

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).

E. 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]

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

~~☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.~~
~~☐ from which fish or shell fish 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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

☐ 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 w~~ NOT APPLICABLE
~~☐ 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., river, streams): 5741 linear feet 4 Ave. width (ft.).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource:
☐ Wetlands: acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report
☐ 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: 1"=1,500' *Chandler Heights, AZ*
☐ USDA Natural Resouces Conservation Service Soil Survey. Citation:
☐ National wetlands inventory map(s). Cite name:
☐ State/Local wetland inventory map(s)
☒ FEMA/FIRM maps: See Figure 2
☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012
or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014
☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04
☐ Applicable/supporting case law:
☐ Applicable/supporting scientific literature:
☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.175394 ºN, Long. -111.681166 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 3-2 flows to AJD 3-3. AJD 3-3 flows to AJD 3-9. AJD 3-9 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~1. TNWs and Adjacent Wetlands.~~ ~~Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 2049 linear feet 5 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.165265 ºN, Long. -111.678982 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 3-2A flows to AJD 3-1. AJD 3-1 flows to AJD 3-3. AJD 3-3 flows to AJD 3-9. AJD 3-9 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~**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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 2883 linear feet 8 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.154109 ºN, Long. -111.657240 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 3-3 flows to AJD 3-9. AJD 3-9 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

NOT APPLICABLE

- Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

- Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Flow is from: Choose an item.
Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.
Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~**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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 32849 linear feet 8 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.167430 ºN, Long. -111.662211 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 3-3A flows to AJD 3-4. AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. 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., river, streams): 647 linear feet 6 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.166120 ºN, Long. -111.673865 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~**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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 23416 linear feet 8 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.158478 ºN, Long. -111.665203 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 3-5 flows to AJD 3-4. AJD 3-4 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~**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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 299 linear feet 12 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.182174 ºN, Long. -111.685831 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 3-6 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~**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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 530 linear feet 15 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.167246 ºN, Long. -111.660416 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~

~~Drainage area:~~

~~Average annual rainfall:~~

~~Average annual snowfall:~~

NOT APPLICABLE

AJD 3-7 flows to AJD 3-3. AJD 3-3 flows to AJD 3-9. AJD 3-9 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

NOT APPLICABLE

Properties:

Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.

Project waters are Choose an item. aerial (straight) miles from TNW.

Flow is from: Choose an item.

Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.

Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 1826 linear feet 3 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.163306 ºN, Long. -111.661150 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on:
      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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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: 6,000 square miles (Middle Gila Watershed)
Drainage area: 5.9 square miles (Box Canyon project area)
Average annual rainfall: 10 inches
Average annual snowfall: N/A

[3] Supporting documentation is presented in Section III.F.
[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid west.

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☒ Tributary flows through 4 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 30 (or more) aerial (straight) miles from TNW.
Project waters are 30 (or more) aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: N/A

Identify flow route to TNW[5]: AJD 3-8 flows into AJD 3-10. AJD 3-10 flows offsite into the channel south of the farmer's dike. The farmer's dike channel flows to the EMF (4 miles) and the EMF flows to the Gila River (9 miles). The Gila River flows 70 miles to the Gila River at Powers Butte (TNW).
Tributary stream order, if known:

(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: varies 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: Varies- highly eroding to gentle slopes
Presence of run/riffle/pool complexes. Explain: N/A
Tributary geometry: Relatively straight
Tributary gradient (approximate average slope): ~1 %

(c) Flow:

Tributary provides for: Ephemeral flow
Estimate average number of flow events in review area/year: 6-10
Describe flow regime: N/A
Other information on duration and volume: N/A

Surface flow is: Discrete and confined Characteristics: N/A

Subsurface flow: Unknown Explain findings: N/A
☐ Dye (or other) test performed: N/A

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☒ the presence of litter and debris
☒ changes in the character of soil	☐ destruction of terrestrial vegetation
☒ shelving	☐ the presence of wrack line
☒ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☒ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

[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.
[6] A 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.

☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain: N/A

Identify specific pollutants, if known: N/A

(iv) Biological Characteristics. Channel supports (check all that apply):

☒ Riparian corridor. Characteristics (type, average width): Xeroriparian, 4' average

☐ Wetland fringe. Characteristics:

☐ Habitat for:

☐ Federally Listed species. Explain findings:

☐ Fish/spawn areas. Explain findings:

☒ Other environmentally-sensitive species. Explain findings: Could provide habitat dispersal habitat for Sonoran Desert Tortoise (*Gopherus morfkai*) and Tucson shovel-nosed snake (*Chionactis occipitalis klauberi*)

☒ Aquatic/wildlife diversity. Explain findings: Wildlife diversity is similar to that found in most ephemeral washes

~~**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**~~

~~**(i) Physical Characteristics:**~~

~~(a) General Wetland Characteristics:~~ NOT APPLICABLE

~~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: . Explain:~~

~~Surface flow is:~~

~~Characteristics:~~

~~Subsurface flow: . Explain findings:~~

~~☐ Dye (or other) test perfomed:~~

~~(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 river miles from TNW.~~

~~Project waters are aerial (straight) miles from TNW.~~

~~Flow is from:~~

~~Estimate approximate location of wetland as within the 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:~~

[7] Ibid.

~~☐ 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:~~
~~Approximately ( ) acres in total are being considered in the cumulative analysis.~~

~~For each wetland, specify the following:~~
~~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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and 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.~~

NOT APPLICABLE

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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication 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 jurisdictional. 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.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

~~☐ from which fish or shell fish 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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

☐ 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 w~~ NOT APPLICABLE
~~☐ 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., river, streams): 1265 linear feet 4 Ave. width (ft.).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource:
☐ Wetlands: acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report
☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resouces Conservation Service Soil Survey. Citation:
☐ National wetlands inventory map(s). Cite name:
☐ State/Local wetland inventory map(s)
☒ FEMA/FIRM maps: See Figure 2
☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012
or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014
☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04
☐ Applicable/supporting case law:
☐ Applicable/supporting scientific literature:
☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.158585 ºN, Long. -111.660657 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

c. Limits (boundaries) of jurisdiction based on: Choose an item.
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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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:~~
~~Drainage area:~~
~~Average annual rainfall:~~
~~Average annual snowfall:~~

AJD 3-9 flows offsite and flow attenuates in Sonoqui Wash during the 5 and 10-year storm events. Flow does not continue to the EMF or Gila River (TNW).

~~**(ii) Physical Characteristics:**~~

~~(a) Relationship with TNW:~~

~~☐ Tributary flows directly into TNW.~~

~~☐ Tributary flows through Choose an item. tributaries before entering TNW.~~

~~Project waters are Choose an item. river miles from TNW.~~

[3] Supporting documentation is presented in Section III.F.

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

Project waters are Choose an item. river miles from RPW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Project waters are Choose an item. aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW[5]:
Tributary stream order, if known:

(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: Click here to enter text. feet
Average depth: Click here to enter text. feet
Average side slopes: Choose an item.

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:
Presence of run/riffle/pool complexes. Explain:
Tributary geometry: Choose an item.
Tributary gradient (approximate average slope): Click here to enter text. %

(c) Flow:
Tributary provides for: Choose an item.
Estimate average number of flow events in review area/year: Choose an item.
Describe flow regime:
Other information on duration and volume:

Surface flow is: Choose an item. Characteristics:

Subsurface flow: Choose an item. Explain findings:
☐ 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 ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):
☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain:
Identify specific pollutants, if known:

[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.
[6] A 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.
[7] Ibid.

(iv) Biological Characteristics. Channel supports (check all that apply):

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ 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:

2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

NOT APPLICABLE

- Wetland size: Click here to enter text. 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: Choose an item.. Explain:

Subsurface flow is: Choose an item.

- Characteristics:

Subsurface flow: Choose an item.. 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 Choose an item. river miles from TNW.
Project waters are Choose an item. aerial (straight) miles from TNW.
Flow is from: Choose an item.
Estimate approximate location of wetland as within the Choose an item. 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: Choose an item.
Approximately (Click here to enter text.) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:~~
~~☐ TNWs: Click here to enter text. Linear feet Click here to enter text. Width (ft.), or, Click here to enter text. acres.~~
~~☐ Wetlands adjacent to TNWs: Click here to enter text. acres.~~

NOT APPLICABLE

~~**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: Click here to enter text. linear feet Click here to enter text. width (ft.).~~
~~☐ Other non-wetland waters: Click here to enter text. 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. 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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication that wetland is directly abutting an RPW:

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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 jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: Click here to enter text. 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: Click here to enter text. acres.

7. Impoundments of jurisdictional waters.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

☐ from which fish or shell fish 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: Click here to enter text. linear feet Click here to enter text. width (ft.).

☐ Other non-wetland waters: Click here to enter text. acres.

Identify type(s) of waters:

☐ Wetlands: Click here to enter text. acres.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNW since the flows do not reach the TNW (attenuate in Sonoqui Wash). Therefore, this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW.

☐ 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: Click here to enter text. acres.~~

~~☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:~~

~~☐ Wetlands: Click here to enter text. 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., river, streams): 580 linear feet 10 Ave. width (ft.).

☐ Lakes/ponds: Click here to enter text. acres.

☐ Other non-wetland waters: Click here to enter text. acres. List type of aquatic resource:

☐ Wetlands: Click here to enter text. acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report

☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resources Conservation Service Soil Survey. Citation:

☐ National wetlands inventory map(s). Cite name:

☐ State/Local wetland inventory map(s)

☒ FEMA/FIRM maps: See Figure 2

☐ 100-year Floodplain Elevation is: Click here to enter text. (National Geodetic Vertical Datum of 1929)

☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012

or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014

☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04

☐ Applicable/supporting case law:

☐ Applicable/supporting scientific literature:

☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.164623 ºN, Long. -111.660893 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

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

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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: 6,000 square miles (Middle Gila Watershed)
Drainage area: 5.9 square miles (Box Canyon project area)
Average annual rainfall: 10 inches
Average annual snowfall: N/A

[3] Supporting documentation is presented in Section III.F.
[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid west.

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☒ Tributary flows through 3 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 30 (or more) aerial (straight) miles from TNW.
Project waters are 30 (or more) aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: N/A

Identify flow route to TNW[5]: AJD 3-10 flows offsite into the channel south of the farmer's dike. The farmer's dike channel flows to the EMF (4 miles) and the EMF flows to the Gila River (9 miles). The Gila River flows 70 miles to the Gila River at Powers Butte (TNW).
Tributary stream order, if known:

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☒ Natural

☐ Artificial (man-made). Explain:

☒ Manipulated (man-altered). Explain: AJD 3-10 is natural until it is intercepted by a channel south of the farmer's dike. AJD 3-10 is the channel south of the farmer's dike until it leaves the project area.

Tributary properties with respect to top of bank (estimate):
Average width: 15 feet
Average depth: varies 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: Varies- highly eroding to gentle slopes
Presence of run/riffle/pool complexes. Explain: N/A
Tributary geometry: Relatively straight
Tributary gradient (approximate average slope): ~1 %

(c) Flow:

Tributary provides for: Ephemeral flow
Estimate average number of flow events in review area/year: 6-10
Describe flow regime: N/A
Other information on duration and volume: N/A

Surface flow is: Discrete and confined Characteristics: N/A

Subsurface flow: Unknown Explain findings: N/A
☐ Dye (or other) test performed: N/A

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☒ the presence of litter and debris
☒ changes in the character of soil	☐ destruction of terrestrial vegetation
☒ shelving	☐ the presence of wrack line
☒ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☒ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community

[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.
[6] A 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.

☐ other (list):

☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain: N/A

Identify specific pollutants, if known: N/A

(iv) Biological Characteristics. Channel supports (check all that apply):

☒ Riparian corridor. Characteristics (type, average width): Xeroriparian, 15' average

☐ Wetland fringe. Characteristics:

☐ Habitat for:

☐ Federally Listed species. Explain findings:

☐ Fish/spawn areas. Explain findings:

☒ Other environmentally-sensitive species. Explain findings: Could provide habitat dispersal habitat for Sonoran Desert Tortoise (*Gopherus morfkai*) and Tucson shovel-nosed snake (*Chionactis occipitalis klauberi*)

☒ Aquatic/wildlife diversity. Explain findings: Wildlife diversity is similar to that found in most ephemeral washes

~~**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**~~

~~**(i) Physical Characteristics:**~~

~~(a) General Wetland Characteristics:~~ NOT APPLICABLE

~~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: . Explain:~~

~~Surface flow is:~~

~~Characteristics:~~

~~Subsurfae flow: . Explain findings:~~

~~☐ Dye (or other) test perfomed:~~

~~(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 river miles from TNW.~~

~~Project waters are aerial (straight) miles from TNW.~~

~~Flow is from:~~

~~Estimate approximate location of wetland as within the 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:~~

[7] Ibid.

~~☐ 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:~~
~~Approximately ( ) acres in total are being considered in the cumulative analysis.~~

~~For each wetland, specify the following:~~
~~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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and 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.

NOT APPLICABLE

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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication 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 jurisdictional. 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.[9]

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).

E. 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]

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

~~☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.~~
~~☐ from which fish or shell fish 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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

☐ 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 w~~ NOT APPLICABLE
~~☐ 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., river, streams): 2426 linear feet 15 Ave. width (ft.).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource:
☐ Wetlands: acres.

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 checked and requested, appropriately reference sources below):
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report
☐ 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: 1"=1,500' *Chandler Heights, AZ*
☐ USDA Natural Resouces Conservation Service Soil Survey. Citation:
☐ National wetlands inventory map(s). Cite name:
☐ State/Local wetland inventory map(s)
☒ FEMA/FIRM maps: See Figure 2
☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012
or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014
☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04
☐ Applicable/supporting case law:
☐ Applicable/supporting scientific literature:
☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.179943 ºN, Long. -111.673552 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on:
      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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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: 6,000 square miles (Middle Gila Watershed)
Drainage area: 5.9 square miles (Box Canyon project area)
Average annual rainfall: 10 inches
Average annual snowfall: N/A

[3] Supporting documentation is presented in Section III.F.

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

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☒ Tributary flows through 3 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 30 (or more) aerial (straight) miles from TNW.
Project waters are 30 (or more) aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: N/A

Identify flow route to TNW[5]: AJD 4-1 flows offsite into the channel south of the farmer's dike. The farmer's dike channel flows to the EMF (4 miles) and the EMF flows to the Gila River (9 miles). The Gila River flows 70 miles to the Gila River at Powers Butte (TNW).
Tributary stream order, if known:

(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: 18 feet
Average depth: varies 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: Varies- highly eroding to gentle slopes
Presence of run/riffle/pool complexes. Explain: N/A
Tributary geometry: Relatively straight
Tributary gradient (approximate average slope): ~1 %

(c) Flow:

Tributary provides for: Ephemeral flow
Estimate average number of flow events in review area/year: 6-10
Describe flow regime: N/A
Other information on duration and volume: N/A

Surface flow is: Discrete and confined Characteristics: N/A

Subsurface flow: Unknown Explain findings: N/A
☐ Dye (or other) test performed: N/A

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☒ the presence of litter and debris
☒ changes in the character of soil	☐ destruction of terrestrial vegetation
☒ shelving	☐ the presence of wrack line
☒ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☒ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

[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.
[6] A 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.

☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain: N/A

Identify specific pollutants, if known: N/A

(iv) Biological Characteristics. Channel supports (check all that apply):

☒ Riparian corridor. Characteristics (type, average width): Xeroriparian, 18' average

☐ Wetland fringe. Characteristics:

☐ Habitat for:

☐ Federally Listed species. Explain findings:

☐ Fish/spawn areas. Explain findings:

☒ Other environmentally-sensitive species. Explain findings: Could provide habitat dispersal habitat for Sonoran Desert Tortoise (*Gopherus morfkai*) and Tucson shovel-nosed snake (*Chionactis occipitalis klauberi*)

☒ Aquatic/wildlife diversity. Explain findings: Wildlife diversity is similar to that found in most ephemeral washes

~~**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**~~

~~**(i) Physical Characteristics:**~~

~~(a) General Wetland Characteristics:~~ NOT APPLICABLE

~~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: . Explain:~~

~~Surface flow is:~~

~~Characteristics:~~

~~Subsurface flow: . Explain findings:~~

~~☐ Dye (or other) test perfomed:~~

~~(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 river miles from TNW.~~

~~Project waters are aerial (straight) miles from TNW.~~

~~Flow is from:~~

~~Estimate approximate location of wetland as within the 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:~~

[7] Ibid.

~~☐ 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:~~
~~Approximately ( ) acres in total are being considered in the cumulative analysis.~~

~~For each wetland, specify the following:~~
~~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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and 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.~~

NOT APPLICABLE

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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication 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 jurisdictional. 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.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

~~☐ from which fish or shell fish 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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

☐ 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 w~~ NOT APPLICABLE
~~☐ 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., river, streams): 9850 linear feet 18 Ave. width (ft.).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource:
☐ Wetlands: acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report
☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resouces Conservation Service Soil Survey. Citation:
☐ National wetlands inventory map(s). Cite name:
☐ State/Local wetland inventory map(s)
☒ FEMA/FIRM maps: See Figure 2
☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012
or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014
☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04
☐ Applicable/supporting case law:
☐ Applicable/supporting scientific literature:
☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.166590 ºN, Long. -111.669231 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on:
      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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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: 6,000 square miles (Middle Gila Watershed)
Drainage area: 5.9 square miles (Box Canyon project area)
Average annual rainfall: 10 inches
Average annual snowfall: N/A

[3] Supporting documentation is presented in Section III.F.
[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid west.

(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 30 (or more) aerial (straight) miles from TNW.
Project waters are 30 (or more) aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: N/A

Identify flow route to TNW[5]: AJD 4-2 flows into AJD 4-4. AJD 4-4 flows to AJD 4-1. AJD 4-1 flows offsite into the channel south of the farmer's dike. The farmer's dike channel flows to the EMF (4 miles) and the EMF flows to the Gila River (9 miles). The Gila River flows 70 miles to the Gila River at Powers Butte (TNW).
Tributary stream order, if known:

(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: varies 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: Varies- highly eroding to gentle slopes
Presence of run/riffle/pool complexes. Explain: N/A
Tributary geometry: Relatively straight
Tributary gradient (approximate average slope): ~1 %

(c) Flow:

Tributary provides for: Ephemeral flow
Estimate average number of flow events in review area/year: 6-10
Describe flow regime: N/A
Other information on duration and volume: N/A

Surface flow is: Discrete and confined Characteristics: N/A

Subsurface flow: Unknown Explain findings: N/A
☐ Dye (or other) test performed: N/A

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☒ the presence of litter and debris
☒ changes in the character of soil	☐ destruction of terrestrial vegetation
☒ shelving	☐ the presence of wrack line
☒ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☒ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

[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.
[6] A 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.

☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain: N/A

Identify specific pollutants, if known: N/A

(iv) Biological Characteristics. Channel supports (check all that apply):

☒ Riparian corridor. Characteristics (type, average width): Xeroriparian, 6' average

☐ Wetland fringe. Characteristics:

☐ Habitat for:

☐ Federally Listed species. Explain findings:

☐ Fish/spawn areas. Explain findings:

☒ Other environmentally-sensitive species. Explain findings: Could provide habitat dispersal habitat for Sonoran Desert Tortoise (*Gopherus morfkai*) and Tucson shovel-nosed snake (*Chionactis occipitalis klauberi*)

☒ Aquatic/wildlife diversity. Explain findings: Wildlife diversity is similar to that found in most ephemeral washes

~~**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**~~

~~**(i) Physical Characteristics:**~~

~~(a) General Wetland Characteristics:~~ NOT APPLICABLE

~~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: . Explain:~~

~~Surface flow is:~~

~~Characteristics:~~

~~Subsurface flow: . Explain findings:~~

~~☐ Dye (or other) test perfomed:~~

~~(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 river miles from TNW.~~

~~Project waters are aerial (straight) miles from TNW.~~

~~Flow is from:~~

~~Estimate approximate location of wetland as within the 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:~~

[7] Ibid.

~~☐ 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:~~
~~Approximately ( ) acres in total are being considered in the cumulative analysis.~~

~~For each wetland, specify the following:~~
~~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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and 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.~~

NOT APPLICABLE

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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication 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 jurisdictional. 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.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

~~☐ from which fish or shell fish 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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

☐ 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 w~~ NOT APPLICABLE
~~☐ 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., river, streams): 2846 linear feet 6 Ave. width (ft.).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource:
☐ Wetlands: acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report
☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resouces Conservation Service Soil Survey. Citation:
☐ National wetlands inventory map(s). Cite name:
☐ State/Local wetland inventory map(s)
☒ FEMA/FIRM maps: See Figure 2
☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012
or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014
☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04
☐ Applicable/supporting case law:
☐ Applicable/supporting scientific literature:
☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.150241 ºN, Long. -111.658210 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on:
      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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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: 6,000 square miles (Middle Gila Watershed)
Drainage area: 5.9 square miles (Box Canyon project area)
Average annual rainfall: 10 inches
Average annual snowfall: N/A

[3] Supporting documentation is presented in Section III.F.
[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid west.

(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 30 (or more) aerial (straight) miles from TNW.
Project waters are 30 (or more) aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: N/A

Identify flow route to TNW[5]: AJD 4-3 flows into AJD 4-2. AJD 4-2 flows into AJD 4-4. AJD 4-4 flows to AJD 4-1. AJD 4-1 flows offsite into the channel south of the farmer's dike. The farmer's dike channel flows to the EMF (4 miles) and the EMF flows to the Gila River (9 miles). The Gila River flows 70 miles to the Gila River at Powers Butte (TNW).
Tributary stream order, if known:

(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: varies 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: Varies- highly eroding to gentle slopes
Presence of run/riffle/pool complexes. Explain: N/A
Tributary geometry: Relatively straight
Tributary gradient (approximate average slope): ~1 %

(c) Flow:

Tributary provides for: Ephemeral flow
Estimate average number of flow events in review area/year: 6-10
Describe flow regime: N/A
Other information on duration and volume: N/A

Surface flow is: Discrete and confined Characteristics: N/A

Subsurface flow: Unknown Explain findings: N/A
☐ Dye (or other) test performed: N/A

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☒ the presence of litter and debris
☒ changes in the character of soil	☐ destruction of terrestrial vegetation
☒ shelving	☐ the presence of wrack line
☒ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☒ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

[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.
[6] A 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.

☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain: N/A

Identify specific pollutants, if known: N/A

(iv) Biological Characteristics. Channel supports (check all that apply):

☒ Riparian corridor. Characteristics (type, average width): Xeroriparian, 6' average

☐ Wetland fringe. Characteristics:

☐ Habitat for:

☐ Federally Listed species. Explain findings:

☐ Fish/spawn areas. Explain findings:

☒ Other environmentally-sensitive species. Explain findings: Could provide habitat dispersal habitat for Sonoran Desert Tortoise (*Gopherus morfkai*) and Tucson shovel-nosed snake (*Chionactis occipitalis klauberi*)

☒ Aquatic/wildlife diversity. Explain findings: Wildlife diversity is similar to that found in most ephemeral washes

~~**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**~~

~~**(i) Physical Characteristics:**~~

~~(a) General Wetland Characteristics:~~ NOT APPLICABLE

~~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: . Explain:~~

~~Surface flow is:~~

~~Characteristics:~~

~~Subsurface flow: . Explain findings:~~

~~☐ Dye (or other) test perfomed:~~

~~(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 river miles from TNW.~~

~~Project waters are aerial (straight) miles from TNW.~~

~~Flow is from:~~

~~Estimate approximate location of wetland as within the 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:~~

[7] Ibid.

~~☐ 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:~~
~~Approximately ( ) acres in total are being considered in the cumulative analysis.~~

~~For each wetland, specify the following:~~
~~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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and 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.~~

NOT APPLICABLE

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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication 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 jurisdictional. 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.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

~~☐ from which fish or shell fish 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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

☐ 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 w~~ NOT APPLICABLE
~~☐ 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., river, streams): 327 linear feet 6 Ave. width (ft.).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource:
☐ Wetlands: acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report
☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resouces Conservation Service Soil Survey. Citation:
☐ National wetlands inventory map(s). Cite name:
☐ State/Local wetland inventory map(s)
☒ FEMA/FIRM maps: See Figure 2
☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012
or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014
☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04
☐ Applicable/supporting case law:
☐ Applicable/supporting scientific literature:
☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.199444 ºN, Long. -111.685733 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on:
      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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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: 6,000 square miles (Middle Gila Watershed)
Drainage area: 5.9 square miles (Box Canyon project area)
Average annual rainfall: 10 inches
Average annual snowfall: N/A

[3] Supporting documentation is presented in Section III.F.

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

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☒ Tributary flows through 4 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 30 (or more) aerial (straight) miles from TNW.
Project waters are 30 (or more) aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: N/A

Identify flow route to TNW[5]: AJD 4-4 flows into AJD 4-1. AJD 4-1 flows offsite into the channel south of the farmer's dike. The farmer's dike channel flows to the EMF (4 miles) and the EMF flows to the Gila River (9 miles). The Gila River flows 70 miles to the Gila River at Powers Butte (TNW).
Tributary stream order, if known:

(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: varies 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: Varies- highly eroding to gentle slopes
Presence of run/riffle/pool complexes. Explain: N/A
Tributary geometry: Relatively straight
Tributary gradient (approximate average slope): ~1 %

(c) Flow:

Tributary provides for: Ephemeral flow
Estimate average number of flow events in review area/year: 6-10
Describe flow regime: N/A
Other information on duration and volume: N/A

Surface flow is: Discrete and confined Characteristics: N/A

Subsurface flow: Unknown Explain findings: N/A
☐ Dye (or other) test performed: N/A

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☒ the presence of litter and debris
☒ changes in the character of soil	☐ destruction of terrestrial vegetation
☒ shelving	☐ the presence of wrack line
☒ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☒ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

[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.
[6] A 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.

☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain: N/A

Identify specific pollutants, if known: N/A

(iv) Biological Characteristics. Channel supports (check all that apply):

☒ Riparian corridor. Characteristics (type, average width): Xeroriparian, 4' average

☐ Wetland fringe. Characteristics:

☐ Habitat for:

☐ Federally Listed species. Explain findings:

☐ Fish/spawn areas. Explain findings:

☒ Other environmentally-sensitive species. Explain findings: Could provide habitat dispersal habitat for Sonoran Desert Tortoise (*Gopherus morfkai*) and Tucson shovel-nosed snake (*Chionactis occipitalis klauberi*)

☒ Aquatic/wildlife diversity. Explain findings: Wildlife diversity is similar to that found in most ephemeral washes

~~**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**~~

~~**(i) Physical Characteristics:**~~

~~(a) General Wetland Characteristics:~~ NOT APPLICABLE

~~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: . Explain:~~

~~Surface flow is:~~

~~Characteristics:~~

~~Subsurface flow: . Explain findings:~~

~~☐ Dye (or other) test perfomed:~~

~~(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 river miles from TNW.~~

~~Project waters are aerial (straight) miles from TNW.~~

~~Flow is from:~~

~~Estimate approximate location of wetland as within the 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:~~

[7] Ibid.

~~☐ 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:~~
~~Approximately ( ) acres in total are being considered in the cumulative analysis.~~

~~For each wetland, specify the following:~~
~~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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and 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.~~

NOT APPLICABLE

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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication 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 jurisdictional. 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.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

~~☐ from which fish or shell fish 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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

☐ 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 w~~ NOT APPLICABLE
~~☐ 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., river, streams): 10601 linear feet 4 Ave. width (ft.).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource:
☐ Wetlands: acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report
☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resouces Conservation Service Soil Survey. Citation:
☐ National wetlands inventory map(s). Cite name:
☐ State/Local wetland inventory map(s)
☒ FEMA/FIRM maps: See Figure 2
☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012
or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014
☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04
☐ Applicable/supporting case law:
☐ Applicable/supporting scientific literature:
☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.193878 ºN, Long. -111.682832 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

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

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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: 6,000 square miles (Middle Gila Watershed)
Drainage area: 5.9 square miles (Box Canyon project area)
Average annual rainfall: 10 inches
Average annual snowfall: N/A

[3] Supporting documentation is presented in Section III.F.
[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid west.

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☒ Tributary flows through 4 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 30 (or more) aerial (straight) miles from TNW.
Project waters are 30 (or more) aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: N/A

Identify flow route to TNW[5]: AJD 4-5 flows into AJD 4-1. AJD 4-1 flows offsite into the channel south of the farmer's dike. The farmer's dike channel flows to the EMF (4 miles) and the EMF flows to the Gila River (9 miles). The Gila River flows 70 miles to the Gila River at Powers Butte (TNW).
Tributary stream order, if known:

(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: varies 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: Varies- highly eroding to gentle slopes
Presence of run/riffle/pool complexes. Explain: N/A
Tributary geometry: Relatively straight
Tributary gradient (approximate average slope): ~1 %

(c) Flow:

Tributary provides for: Ephemeral flow
Estimate average number of flow events in review area/year: 6-10
Describe flow regime: N/A
Other information on duration and volume: N/A

Surface flow is: Discrete and confined Characteristics: N/A

Subsurface flow: Unknown Explain findings: N/A
☐ Dye (or other) test performed: N/A

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☒ the presence of litter and debris
☒ changes in the character of soil	☐ destruction of terrestrial vegetation
☒ shelving	☐ the presence of wrack line
☒ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☒ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

[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.
[6] A 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.

☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain: N/A

Identify specific pollutants, if known: N/A

(iv) Biological Characteristics. Channel supports (check all that apply):

☒ Riparian corridor. Characteristics (type, average width): Xeroriparian, 6' average

☐ Wetland fringe. Characteristics:

☐ Habitat for:

☐ Federally Listed species. Explain findings:

☐ Fish/spawn areas. Explain findings:

☒ Other environmentally-sensitive species. Explain findings: Could provide habitat dispersal habitat for Sonoran Desert Tortoise (*Gopherus morfkai*) and Tucson shovel-nosed snake (*Chionactis occipitalis klauberi*)

☒ Aquatic/wildlife diversity. Explain findings: Wildlife diversity is similar to that found in most ephemeral washes

~~**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**~~

~~**(i) Physical Characteristics:**~~

~~(a) General Wetland Characteristics:~~ NOT APPLICABLE

~~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: . Explain:~~

~~Surface flow is:~~

~~Characteristics:~~

~~Subsurface flow: . Explain findings:~~

~~☐ Dye (or other) test perfomed:~~

~~(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 river miles from TNW.~~

~~Project waters are aerial (straight) miles from TNW.~~

~~Flow is from:~~

~~Estimate approximate location of wetland as within the 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:~~

[7] Ibid.

~~☐ 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:~~
~~Approximately ( ) acres in total are being considered in the cumulative analysis.~~

~~For each wetland, specify the following:~~
~~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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and 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.~~

NOT APPLICABLE

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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication 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 jurisdictional. 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.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

~~☐ from which fish or shell fish 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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

☐ 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 w~~ NOT APPLICABLE
~~☐ 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., river, streams): 6609 linear feet 6 Ave. width (ft.).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource:
☐ Wetlands: acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report
☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resouces Conservation Service Soil Survey. Citation:
☐ National wetlands inventory map(s). Cite name:
☐ State/Local wetland inventory map(s)
☒ FEMA/FIRM maps: See Figure 2
☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012
or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014
☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04
☐ Applicable/supporting case law:
☐ Applicable/supporting scientific literature:
☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.184337 ºN, Long. -111.679401 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on:
      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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~
~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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: 6,000 square miles (Middle Gila Watershed)
Drainage area: 5.9 square miles (Box Canyon project area)
Average annual rainfall: 10 inches
Average annual snowfall: N/A

[3] Supporting documentation is presented in Section III.F.
[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid west.

(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 30 (or more) aerial (straight) miles from TNW.
Project waters are 30 (or more) aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: N/A

Identify flow route to TNW[5]: AJD 4-6 flows into AJD 4-5. AJD 4-5 flows into AJD 4-1. AJD 4-1 flows offsite into the channel south of the farmer's dike. The farmer's dike channel flows to the EMF (4 miles) and the EMF flows to the Gila River (9 miles). The Gila River flows 70 miles to the Gila River at Powers Butte (TNW).
Tributary stream order, if known:

(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: varies 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: Varies- highly eroding to gentle slopes
Presence of run/riffle/pool complexes. Explain: N/A
Tributary geometry: Relatively straight
Tributary gradient (approximate average slope): ~1 %

(c) Flow:

Tributary provides for: Ephemeral flow
Estimate average number of flow events in review area/year: 6-10
Describe flow regime: N/A
Other information on duration and volume: N/A

Surface flow is: Discrete and confined Characteristics: N/A

Subsurface flow: Unknown Explain findings: N/A
☐ Dye (or other) test performed: N/A

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☒ the presence of litter and debris
☒ changes in the character of soil	☐ destruction of terrestrial vegetation
☒ shelving	☐ the presence of wrack line
☒ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☒ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

[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.
[6] A 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.

☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain: N/A

Identify specific pollutants, if known: N/A

(iv) Biological Characteristics. Channel supports (check all that apply):

☒ Riparian corridor. Characteristics (type, average width): Xeroriparian, 6' average

☐ Wetland fringe. Characteristics:

☐ Habitat for:

☐ Federally Listed species. Explain findings:

☐ Fish/spawn areas. Explain findings:

☒ Other environmentally-sensitive species. Explain findings: Could provide habitat dispersal habitat for Sonoran Desert Tortoise (*Gopherus morfkai*) and Tucson shovel-nosed snake (*Chionactis occipitalis klauberi*)

☒ Aquatic/wildlife diversity. Explain findings: Wildlife diversity is similar to that found in most ephemeral washes

~~**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**~~

~~**(i) Physical Characteristics:**~~

~~(a) General Wetland Characteristics:~~ NOT APPLICABLE

~~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: . Explain:~~

~~Surface flow is:~~

~~Characteristics:~~

~~Subsurface flow: . Explain findings:~~

~~☐ Dye (or other) test perfomed:~~

~~(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 river miles from TNW.~~

~~Project waters are aerial (straight) miles from TNW.~~

~~Flow is from:~~

~~Estimate approximate location of wetland as within the 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:~~

[7] Ibid.

~~☐ 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:~~
~~Approximately ( ) acres in total are being considered in the cumulative analysis.~~

~~For each wetland, specify the following:~~
~~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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and 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.~~

NOT APPLICABLE

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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication 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 jurisdictional. 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.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

☐ from which fish or shell fish 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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

☐ 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 w NOT APPLICABLE
☐ 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., river, streams): 595 linear feet 6 Ave. width (ft.).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource:
☐ Wetlands: acres.

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 checked and requested, appropriately reference sources below):
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report
☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resouces Conservation Service Soil Survey. Citation:
☐ National wetlands inventory map(s). Cite name:
☐ State/Local wetland inventory map(s)
☒ FEMA/FIRM maps: See Figure 2
☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012
or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014
☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04
☐ Applicable/supporting case law:
☐ Applicable/supporting scientific literature:
☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.165983 ºN, Long. -111.667363 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on:
      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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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: 6,000 square miles (Middle Gila Watershed)
Drainage area: 5.9 square miles (Box Canyon project area)
Average annual rainfall: 10 inches
Average annual snowfall: N/A

[3] Supporting documentation is presented in Section III.F.
[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid west.

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☒ Tributary flows through 4 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 30 (or more) aerial (straight) miles from TNW.
Project waters are 30 (or more) aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: N/A

Identify flow route to TNW[5]: AJD 4-7 flows into AJD 4-1. AJD 4-1 flows offsite into the channel south of the farmer's dike. The farmer's dike channel flows to the EMF (4 miles) and the EMF flows to the Gila River (9 miles). The Gila River flows 70 miles to the Gila River at Powers Butte (TNW).
Tributary stream order, if known:

(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: varies 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: Varies- highly eroding to gentle slopes
Presence of run/riffle/pool complexes. Explain: N/A
Tributary geometry: Relatively straight
Tributary gradient (approximate average slope): ~1 %

(c) Flow:

Tributary provides for: Ephemeral flow
Estimate average number of flow events in review area/year: 6-10
Describe flow regime: N/A
Other information on duration and volume: N/A

Surface flow is: Discrete and confined Characteristics: N/A

Subsurface flow: Unknown Explain findings: N/A
☐ Dye (or other) test performed: N/A

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☒ the presence of litter and debris
☒ changes in the character of soil	☐ destruction of terrestrial vegetation
☒ shelving	☐ the presence of wrack line
☒ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☒ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

[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.
[6] A 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.

☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain: N/A

Identify specific pollutants, if known: N/A

(iv) Biological Characteristics. Channel supports (check all that apply):

☒ Riparian corridor. Characteristics (type, average width): Xeroriparian, 6' average

☐ Wetland fringe. Characteristics:

☐ Habitat for:

☐ Federally Listed species. Explain findings:

☐ Fish/spawn areas. Explain findings:

☒ Other environmentally-sensitive species. Explain findings: Could provide habitat dispersal habitat for Sonoran Desert Tortoise (*Gopherus morfkai*) and Tucson shovel-nosed snake (*Chionactis occipitalis klauberi*)

☒ Aquatic/wildlife diversity. Explain findings: Wildlife diversity is similar to that found in most ephemeral washes

~~**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**~~

~~**(i) Physical Characteristics:**~~

~~(a) General Wetland Characteristics:~~ NOT APPLICABLE

~~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: . Explain:~~

~~Surface flow is:~~

~~Characteristics:~~

~~Subsurface flow: . Explain findings:~~

~~☐ Dye (or other) test perfomed:~~

~~(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 river miles from TNW.~~

~~Project waters are aerial (straight) miles from TNW.~~

~~Flow is from:~~

~~Estimate approximate location of wetland as within the 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:~~

[7] Ibid.

~~☐ 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:~~
~~Approximately ( ) acres in total are being considered in the cumulative analysis.~~

~~For each wetland, specify the following:~~
~~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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and 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.~~

NOT APPLICABLE

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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication 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 jurisdictional. 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.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

~~☐ from which fish or shell fish 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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

☐ 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 w~~ NOT APPLICABLE
~~☐ 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., river, streams): 4786 linear feet 6 Ave. width (ft.).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource:
☐ Wetlands: acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report
☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resouces Conservation Service Soil Survey. Citation:
☐ National wetlands inventory map(s). Cite name:
☐ State/Local wetland inventory map(s)
☒ FEMA/FIRM maps: See Figure 2
☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012
or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014
☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04
☐ Applicable/supporting case law:
☐ Applicable/supporting scientific literature:
☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.157816 ºN, Long. -111.660197 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on:
      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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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: 6,000 square miles (Middle Gila Watershed)
Drainage area: 5.9 square miles (Box Canyon project area)
Average annual rainfall: 10 inches
Average annual snowfall: N/A

[3] Supporting documentation is presented in Section III.F.
[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid west.

(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 30 (or more) aerial (straight) miles from TNW.
Project waters are 30 (or more) aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: N/A

Identify flow route to TNW[5]: AJD 4-8 flows into AJD 4-7. AJD 4-7 flows into AJD 4-1. AJD 4-1 flows offsite into the channel south of the farmer's dike. The farmer's dike channel flows to the EMF (4 miles) and the EMF flows to the Gila River (9 miles). The Gila River flows 70 miles to the Gila River at Powers Butte (TNW).
Tributary stream order, if known:

(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: varies 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: Varies- highly eroding to gentle slopes
Presence of run/riffle/pool complexes. Explain: N/A
Tributary geometry: Relatively straight
Tributary gradient (approximate average slope): ~1 %

(c) Flow:

Tributary provides for: Ephemeral flow
Estimate average number of flow events in review area/year: 6-10
Describe flow regime: N/A
Other information on duration and volume: N/A

Surface flow is: Discrete and confined Characteristics: N/A

Subsurface flow: Unknown Explain findings: N/A
☐ Dye (or other) test performed: N/A

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☒ the presence of litter and debris
☒ changes in the character of soil	☐ destruction of terrestrial vegetation
☒ shelving	☐ the presence of wrack line
☒ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☒ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

[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.
[6] A 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.

☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain: N/A

Identify specific pollutants, if known: N/A

(iv) Biological Characteristics. Channel supports (check all that apply):

☒ Riparian corridor. Characteristics (type, average width): Xeroriparian, 5' average

☐ Wetland fringe. Characteristics:

☐ Habitat for:

☐ Federally Listed species. Explain findings:

☐ Fish/spawn areas. Explain findings:

☒ Other environmentally-sensitive species. Explain findings: Could provide habitat dispersal habitat for Sonoran Desert Tortoise (*Gopherus morfkai*) and Tucson shovel-nosed snake (*Chionactis occipitalis klauberi*)

☒ Aquatic/wildlife diversity. Explain findings: Wildlife diversity is similar to that found in most ephemeral washes

~~**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**~~

~~**(i) Physical Characteristics:**~~

~~(a) General Wetland Characteristics:~~ NOT APPLICABLE

~~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: . Explain:~~

~~Surface flow is:~~

~~Characteristics:~~

~~Subsurface flow: . Explain findings:~~

~~☐ Dye (or other) test perfomed:~~

~~(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 river miles from TNW.~~

~~Project waters are aerial (straight) miles from TNW.~~

~~Flow is from:~~

~~Estimate approximate location of wetland as within the 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:~~

[7] Ibid.

~~☐ 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:~~
~~Approximately ( ) acres in total are being considered in the cumulative analysis.~~

~~For each wetland, specify the following:~~
~~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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and 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.~~

NOT APPLICABLE

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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication 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 jurisdictional. 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.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

~~☐ from which fish or shell fish 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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

☐ 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 w~~ NOT APPLICABLE
~~☐ 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., river, streams): 1200 linear feet 5 Ave. width (ft.).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource:
☐ Wetlands: acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report
☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resouces Conservation Service Soil Survey. Citation:
☐ National wetlands inventory map(s). Cite name:
☐ State/Local wetland inventory map(s)
☒ FEMA/FIRM maps: See Figure 2
☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012
or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014
☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04
☐ Applicable/supporting case law:
☐ Applicable/supporting scientific literature:
☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.181726 ºN, Long. -111.673203 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on:
      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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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: 6,000 square miles (Middle Gila Watershed)
Drainage area: 5.9 square miles (Box Canyon project area)
Average annual rainfall: 10 inches
Average annual snowfall: N/A

[3] Supporting documentation is presented in Section III.F.
[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid west.

(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 30 (or more) aerial (straight) miles from TNW.
Project waters are 30 (or more) aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: N/A

Identify flow route to TNW[5]: AJD 4-9 flows into AJD 4-7. AJD 4-7 flows into AJD 4-1. AJD 4-1 flows offsite into the channel south of the farmer's dike. The farmer's dike channel flows to the EMF (4 miles) and the EMF flows to the Gila River (9 miles). The Gila River flows 70 miles to the Gila River at Powers Butte (TNW).
Tributary stream order, if known:

(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: varies 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: Varies- highly eroding to gentle slopes
Presence of run/riffle/pool complexes. Explain: N/A
Tributary geometry: Relatively straight
Tributary gradient (approximate average slope): ~1 %

(c) Flow:

Tributary provides for: Ephemeral flow
Estimate average number of flow events in review area/year: 6-10
Describe flow regime: N/A
Other information on duration and volume: N/A

Surface flow is: Discrete and confined Characteristics: N/A

Subsurface flow: Unknown Explain findings: N/A
☐ Dye (or other) test performed: N/A

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☒ the presence of litter and debris
☒ changes in the character of soil	☐ destruction of terrestrial vegetation
☒ shelving	☐ the presence of wrack line
☒ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☒ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

[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.
[6] A 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.

☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain: N/A

Identify specific pollutants, if known: N/A

(iv) Biological Characteristics. Channel supports (check all that apply):

☒ Riparian corridor. Characteristics (type, average width): Xeroriparian, 5' average

☐ Wetland fringe. Characteristics:

☐ Habitat for:

☐ Federally Listed species. Explain findings:

☐ Fish/spawn areas. Explain findings:

☒ Other environmentally-sensitive species. Explain findings: Could provide habitat dispersal habitat for Sonoran Desert Tortoise (*Gopherus morfkai*) and Tucson shovel-nosed snake (*Chionactis occipitalis klauberi*)

☒ Aquatic/wildlife diversity. Explain findings: Wildlife diversity is similar to that found in most ephemeral washes

~~**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**~~

~~**(i) Physical Characteristics:**~~

~~(a) General Wetland Characteristics:~~ NOT APPLICABLE

~~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: . Explain:~~

~~Surface flow is:~~

~~Characteristics:~~

~~Subsurface flow: . Explain findings:~~

~~☐ Dye (or other) test perfomed:~~

~~(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 river miles from TNW.~~

~~Project waters are aerial (straight) miles from TNW.~~

~~Flow is from:~~

~~Estimate approximate location of wetland as within the 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:~~

[7] Ibid.

~~☐ 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:~~
~~Approximately ( ) acres in total are being considered in the cumulative analysis.~~

~~For each wetland, specify the following:~~
~~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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and 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.~~

NOT APPLICABLE

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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication 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 jurisdictional. 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.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

~~☐ from which fish or shell fish 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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

☐ 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 w~~ NOT APPLICABLE
~~☐ 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., river, streams): 784 linear feet 5 Ave. width (ft.).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource:
☐ Wetlands: acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report
☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resouces Conservation Service Soil Survey. Citation:
☐ National wetlands inventory map(s). Cite name:
☐ State/Local wetland inventory map(s)
☒ FEMA/FIRM maps: See Figure 2
☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012
or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014
☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04
☐ Applicable/supporting case law:
☐ Applicable/supporting scientific literature:
☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.161357 ºN, Long. -111.680743 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
      Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on:
      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).

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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: 6,000 square miles (Middle Gila Watershed)
Drainage area: 5.9 square miles (Box Canyon project area)
Average annual rainfall: 10 inches
Average annual snowfall: N/A

[3] Supporting documentation is presented in Section III.F.
[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid west.

(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 30 (or more) aerial (straight) miles from TNW.
Project waters are 30 (or more) aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: N/A

Identify flow route to TNW[5]: AJD 4-10 flows into AJD 4-7. AJD 4-7 flows into AJD 4-1. AJD 4-1 flows offsite into the channel south of the farmer's dike. The farmer's dike channel flows to the EMF (4 miles) and the EMF flows to the Gila River (9 miles). The Gila River flows 70 miles to the Gila River at Powers Butte (TNW).
Tributary stream order, if known:

(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: 10 feet
Average depth: varies 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: Varies- highly eroding to gentle slopes
Presence of run/riffle/pool complexes. Explain: N/A
Tributary geometry: Relatively straight
Tributary gradient (approximate average slope): ~1 %

(c) Flow:

Tributary provides for: Ephemeral flow
Estimate average number of flow events in review area/year: 6-10
Describe flow regime: N/A
Other information on duration and volume: N/A

Surface flow is: Discrete and confined Characteristics: N/A

Subsurface flow: Unknown Explain findings: N/A
☐ Dye (or other) test performed: N/A

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☒ the presence of litter and debris
☒ changes in the character of soil	☐ destruction of terrestrial vegetation
☒ shelving	☐ the presence of wrack line
☒ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☒ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

[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.
[6] A 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.

☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain: N/A

Identify specific pollutants, if known: N/A

(iv) Biological Characteristics. Channel supports (check all that apply):

☒ Riparian corridor. Characteristics (type, average width): Xeroriparian, 10' average

☐ Wetland fringe. Characteristics:

☐ Habitat for:

☐ Federally Listed species. Explain findings:

☐ Fish/spawn areas. Explain findings:

☒ Other environmentally-sensitive species. Explain findings: Could provide habitat dispersal habitat for Sonoran Desert Tortoise (*Gopherus morfkai*) and Tucson shovel-nosed snake (*Chionactis occipitalis klauberi*)

☒ Aquatic/wildlife diversity. Explain findings: Wildlife diversity is similar to that found in most ephemeral washes

~~**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**~~

~~**(i) Physical Characteristics:**~~

~~(a) General Wetland Characteristics:~~ NOT APPLICABLE

~~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: . Explain:~~

~~Surface flow is:~~

~~Characteristics:~~

~~Subsurface flow: . Explain findings:~~

~~☐ Dye (or other) test perfomed:~~

~~(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 river miles from TNW.~~

~~Project waters are aerial (straight) miles from TNW.~~

~~Flow is from:~~

~~Estimate approximate location of wetland as within the 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:~~

[7] Ibid.

~~☐ 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:~~
~~Approximately ( ) acres in total are being considered in the cumulative analysis.~~

~~For each wetland, specify the following:~~
~~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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and 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.~~

NOT APPLICABLE

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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication 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 jurisdictional. 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.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

~~☐ from which fish or shell fish 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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

☐ 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 w~~ NOT APPLICABLE
~~☐ 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., river, streams): 2705 linear feet 10 Ave. width (ft.).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource:
☐ Wetlands: acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report
☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resouces Conservation Service Soil Survey. Citation:
☐ National wetlands inventory map(s). Cite name:
☐ State/Local wetland inventory map(s)
☒ FEMA/FIRM maps: See Figure 2
☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012
or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014
☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04
☐ Applicable/supporting case law:
☐ Applicable/supporting scientific literature:
☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:

C. PROJECT LOCATION AND BACKGROUND INFORMATION:
State: AZ County/parish/borough: Pinal City: Queen Creek
Center coordinates of site (lat/long in degree decimal format): Lat. 33.191090 ºN, Long. -111.680388 ºW
Universal Transverse Mercator:
Name of nearest waterbody: Gila River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Gila River
Name of watershed or Hydrologic Unit Code (HUC): 15050100 Middle Gila Watershed
☒ 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):

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:

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 acres.
Wetlands: acres.

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

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

☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:~~

NOT APPLICABLE

~~Summarize rational supporting determination:~~

~~**2. Wetland adjacent to TNW**~~

~~Summarize rational 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 and 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 traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody[4] 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 what 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: 6,000 square miles (Middle Gila Watershed)
Drainage area: 5.9 square miles (Box Canyon project area)
Average annual rainfall: 10 inches
Average annual snowfall: N/A

[3] Supporting documentation is presented in Section III.F.
[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid west.

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

☒ Tributary flows through 4 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 30 (or more) aerial (straight) miles from TNW.
Project waters are 30 (or more) aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: N/A

Identify flow route to TNW[5]: AJD 4-11 flows into AJD 4-1. AJD 4-1 flows offsite into the channel south of the farmer's dike. The farmer's dike channel flows to the EMF (4 miles) and the EMF flows to the Gila River (9 miles). The Gila River flows 70 miles to the Gila River at Powers Butte (TNW).
Tributary stream order, if known:

(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: varies 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: Varies- highly eroding to gentle slopes
Presence of run/riffle/pool complexes. Explain: N/A
Tributary geometry: Relatively straight
Tributary gradient (approximate average slope): ~1 %

(c) Flow:

Tributary provides for: Ephemeral flow
Estimate average number of flow events in review area/year: 6-10
Describe flow regime: N/A
Other information on duration and volume: N/A

Surface flow is: Discrete and confined Characteristics: N/A

Subsurface flow: Unknown Explain findings: N/A
☐ Dye (or other) test performed: N/A

Tributary has (check all that apply):
☒ Bed and banks
☒ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☒ the presence of litter and debris
☒ changes in the character of soil	☐ destruction of terrestrial vegetation
☒ shelving	☐ the presence of wrack line
☒ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☒ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

[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.
[6] A 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.

☐ Discontinuous OHWM.[7] Explain:

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.)
Explain: N/A

Identify specific pollutants, if known: N/A

(iv) Biological Characteristics. Channel supports (check all that apply):

☒ Riparian corridor. Characteristics (type, average width): Xeroriparian, 7' average

☐ Wetland fringe. Characteristics:

☐ Habitat for:

☐ Federally Listed species. Explain findings:

☐ Fish/spawn areas. Explain findings:

☒ Other environmentally-sensitive species. Explain findings: Could provide habitat dispersal habitat for Sonoran Desert Tortoise (*Gopherus morfkai*) and Tucson shovel-nosed snake (*Chionactis occipitalis klauberi*)

☒ Aquatic/wildlife diversity. Explain findings: Wildlife diversity is similar to that found in most ephemeral washes

~~**2. Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**~~

~~**(i) Physical Characteristics:**~~

~~(a) General Wetland Characteristics:~~ NOT APPLICABLE

~~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: . Explain:~~

~~Surface flow is:~~

~~Characteristics:~~

~~Subsurface flow: . Explain findings:~~

~~☐ Dye (or other) test perfomed:~~

~~(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 river miles from TNW.~~

~~Project waters are aerial (straight) miles from TNW.~~

~~Flow is from:~~

~~Estimate approximate location of wetland as within the 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:~~

[7] Ibid.

~~☐ 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:~~
~~Approximately ( ) acres in total are being considered in the cumulative analysis.~~

~~For each wetland, specify the following:~~
~~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 evaluation 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:

   Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

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:N/A

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:N/A

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

~~**1. TNWs and 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.~~

NOT APPLICABLE

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 and thus are where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.D, above. Provide rationale indicating that wetland is directly abutting and RPW:

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally". Provide data indicating that tributary is seasonal in Section III.B and rational in Section III.D.2, above. Provide rationale indication 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 jurisdictional. 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.[9]

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).

E. 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]

☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.

[8] See Footnote #3

[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

[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 *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.***

~~☐ from which fish or shell fish 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:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus. This wash is 1 of 14 that has flows that continue downstream to the East Maricopa Floodway (EMF) via tributaries. During the 5-year storm event 143 cubic feet per second (cfs) of flow enters the EMF, during the 10-year event 329 cfs of flow enters the EMF, and during the 100-year event 736 cfs of flow enters the EMF. This flow would then have to travel 9 miles in the EMF to the Gila River and 70 miles in the Gila River to the Gila River at Powers Butte (TNW). The HEC-1 model results show that approximately 18 cfs would reach the TNW in the 100-year event. Based on the gage data, the peak discharge in Gila River is 75,883 cfs. The discharge originating from Box Canyon that reaches the TNW is 0.02% of the peak flow in the TNW. Therefore, it was determined that this tributary is not anticipated to significantly affect the physical, chemical, or biological integrity of the TNW and does not have a significant nexus to the TNW.

☐ 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 w~~ NOT APPLICABLE
~~☐ 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., river, streams): 2389 linear feet 7 Ave. width (ft.).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource:
☐ Wetlands: acres.

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 checked and requested, appropriately reference sources below):

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: See AJD report
☐ 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: 1"=1,500' *Chandler Heights, AZ*

☐ USDA Natural Resouces Conservation Service Soil Survey. Citation:
☐ National wetlands inventory map(s). Cite name:
☐ State/Local wetland inventory map(s)
☒ FEMA/FIRM maps: See Figure 2
☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date): FCDMC 2012
or ☒ Other (Name & Date): Ground photographs January 9th & 10th, 2014
☒ Previous determination (s). File no. and date of response letter: 2004-00933-SDM, 05/10/04
☐ Applicable/supporting case law:
☐ Applicable/supporting scientific literature:
☒ Other information (please specify): See AJD report

B. ADDITIONAL COMMENTS TO SUPPORT JD: See AJD report