APPENDIX B

APPROVED JURISDICTIONAL DELINEATION FORMS

Feature ID: G

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature G**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage G

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	173.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

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Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: G

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: G

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012)

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1710	linear feet (ft),	2.1	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: G

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: G1

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** G1

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage G1

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	173.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: G1

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: G1

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: G1

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012)

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1220	linear feet (ft),	1.8	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: G1

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: H

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature H**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage H

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	173.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: H

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: H

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: H

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012)

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	2900	linear feet (ft),	2.3	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: H

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **H1**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature H1**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage H1

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet | Width (ft) and/or | Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	173.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: H1

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: H1

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: H1

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012)

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1520	linear feet (ft),	2.1	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: H1

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: I

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature I**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage I

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: I

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: I

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: I

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	2543	linear feet (ft),	5.0	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: I

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **I1**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature I1**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage I1

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet | Width (ft) and/or | Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: I1

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: I1

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: I1

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1230	linear feet (ft),	1.8	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: I1

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **I2**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature I2**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage I2

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet | Width (ft) and/or | Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: I2

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: I2

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: I2

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	710	linear feet (ft),	3.3	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: I2

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: J

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** J

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage J

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: J

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: J

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: J

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	3447	linear feet (ft),	3.1	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: J

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **K**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature K**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage K

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: K

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: K

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: K

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1107	linear feet (ft),	5.8	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: K

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: K1

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** K1

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage K1

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: K1

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: K1

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: K1

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	382	linear feet (ft),	3.0	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: K1

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **K2**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** **K2**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage K2

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet | Width (ft) and/or | Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: K2

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: K2

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: K2

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1525	linear feet (ft),	2.4	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: K2

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **K2a**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** **K2a**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage K2a

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: K2a

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: K2a

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: K2a

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	308	linear feet (ft),	2.5	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: K2a

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: L

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** L

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage L

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: L

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: L

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: L

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1281	linear feet (ft),	4.8	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: L

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **L1**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature L1**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage L1

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet | Width (ft) and/or | Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: L1

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: L1

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: L1

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1052	linear feet (ft),	4.7	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: L1

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: L2

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature L2**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage L2

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: L2

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: L2

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: L2

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1212	linear feet (ft),	2.4	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: L2

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: L2a

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** L2a

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage L2a

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: L2a

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: L2a

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: L2a

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1395	linear feet (ft),	2.8	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: L2a

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: L3

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** L3

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage L3

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: L3

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: L3

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: L3

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	978	linear feet (ft),	3.2	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: L3

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **L4**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature L4**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage L4

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet | Width (ft) and/or | Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: L4

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: L4

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

- ☐ Riparian Buffer Explain:
- ☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: L4

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	725	linear feet (ft),	2.0	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: L4

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **M**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature M**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage M

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: M

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: M

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: M

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	2985	linear feet (ft),	9.5	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: M

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **M3**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature M3**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage M3

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet | Width (ft) and/or | Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: M3

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: M3

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: M3

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	690	linear feet (ft),	6.7	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: M3

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: M4

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** M4

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage M4

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet | Width (ft) and/or | Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: M4

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: M4

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: M4

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	596	linear feet (ft),	3.0	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: M4

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: M5

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** M5

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage M5

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: M5

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: M5

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: M5

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	2066	linear feet (ft),	7.0	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: M5

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **M5a**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature M5a**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage M5a

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: M5a

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: M5a

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: M5a

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1972	linear feet (ft),	2.0	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: M5a

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: M5ai

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** M5ai

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage M5ai

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: M5ai

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: M5ai

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: M5ai

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	919	linear feet (ft),	2.2	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: M5ai

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: M6

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** M6

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage M6

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: M6

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: M6

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: M6

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1162	linear feet (ft),	4.1	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: M6

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: M7

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** M7

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage M7

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: M7

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: M7

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: M7

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1356	linear feet (ft),	6.0	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: M7

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: M8

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** M8

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage M8

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: M8

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: M8

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: M8

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	720	linear feet (ft),	4.7	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: M8

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: N

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** N

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage N

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: N

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: N

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: N

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	2896	linear feet (ft),	11.0	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: N

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **N1**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature N1**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage N1

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet | Width (ft) and/or | Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: N1

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: N1

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: N1

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	263	linear feet (ft),	10.0	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: N1

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: O

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature O**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage O

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: O

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: O

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: O

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	4589	linear feet (ft),	7.5	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: O

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: O1

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** O1

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage O1

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: O1

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for:	Ephemeral Flow	Average Flow Events per year:	1
Describe Flow Regime:	Ephemeral	Other Information on Duration and Volume:	
Surface Flow is:	Overland Sheetflow	Characteristics:	
Subsurface Flow:	No	Explain:	

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank	☐ Vegetation matted down, bent or absent
☑ Changes in soil character	☐ Leaf litter disturbed or washed away
☐ Shelving	☐ Presence of litter and debris
☑ Sediment deposition	☐ Destruction of terrestrial vegetation
☐ Sediment sorting	☐ Abrupt change in plant community
☐ Scour	☐ Multiple observed or predicted flow events
☐ Presence of wrack line	☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: O1

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: O1

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	6929	linear feet (ft),	10.1	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: O1

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **O1a**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature O1a**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage O1a

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet | Width (ft) and/or | Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: O1a

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: O1a

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: O1a

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	457	linear feet (ft),	1.7	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: O1a

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: P

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** P

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage P

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: P

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: P

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: P

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	4902	linear feet (ft),	9.3	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: P

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **P1**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature P1**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage P1

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet | Width (ft) and/or | Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: **P1**

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for:	Ephemeral Flow	Average Flow Events per year:	1
Describe Flow Regime:	Ephemeral	Other Information on Duration and Volume:	
Surface Flow is:	Overland Sheetflow	Characteristics:	
Subsurface Flow:	No	Explain:	

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank	☐ Vegetation matted down, bent or absent
☑ Changes in soil character	☐ Leaf litter disturbed or washed away
☐ Shelving	☐ Presence of litter and debris
☑ Sediment deposition	☐ Destruction of terrestrial vegetation
☐ Sediment sorting	☐ Abrupt change in plant community
☐ Scour	☐ Multiple observed or predicted flow events
☐ Presence of wrack line	☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: P1

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: P1

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1455	linear feet (ft),	4.3	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: P1

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **P1a**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature P1a**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage P1a

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet | Width (ft) and/or | Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: P1a

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: P1a

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: P1a

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1202	linear feet (ft),	2.0	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: P1a

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **P2**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature P2**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage P2

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet | Width (ft) and/or | Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: P2

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: P2

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: P2

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1326	linear feet (ft),	2.4	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: P2

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **P3**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature P3**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage P3

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet | Width (ft) and/or | Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: P3

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: P3

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: P3

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	2722	linear feet (ft),	5.6	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: P3

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **P3a**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature P3a**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage P3a

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: P3a

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: P3a

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: P3a

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	496	linear feet (ft),	3.0	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: P3a

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **P4**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature P4**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage P4

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet | Width (ft) and/or | Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: P4

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for:	Ephemeral Flow	Average Flow Events per year:	1
Describe Flow Regime:	Ephemeral	Other Information on Duration and Volume:	
Surface Flow is:	Overland Sheetflow	Characteristics:	
Subsurface Flow:	No	Explain:	

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank	☐ Vegetation matted down, bent or absent
☑ Changes in soil character	☐ Leaf litter disturbed or washed away
☐ Shelving	☐ Presence of litter and debris
☑ Sediment deposition	☐ Destruction of terrestrial vegetation
☐ Sediment sorting	☐ Abrupt change in plant community
☐ Scour	☐ Multiple observed or predicted flow events
☐ Presence of wrack line	☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: P4

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: P4

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	834	linear feet (ft),	2.7	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: P4

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **P5**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature P5**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage P5

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet | Width (ft) and/or | Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: P5

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: P5

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: P5

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	752	linear feet (ft),	2.4	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: P5

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: Q

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** Q

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage Q

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: Q

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: Q

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: Q

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1385	linear feet (ft),	3.2	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: Q

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **R**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature R**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage R

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: R

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: R

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: R

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	7607	linear feet (ft),	13.3	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: R

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **R1**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature R1**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage R1

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: R1

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: R1

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: R1

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	481	linear feet (ft),	2.7	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: R1

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **R2**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature R2**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage R2

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet | Width (ft) and/or | Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: R2

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: R2

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

- ☐ Riparian Buffer Explain:
- ☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: R2

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1564	linear feet (ft),	5.0	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: R2

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **R3**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature R3**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage R3

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet | Width (ft) and/or | Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: R3

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: R3

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: R3

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1251	linear feet (ft),	3.0	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: R3

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: S

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** S

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage S

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: S

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: S

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: S

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	6921	linear feet (ft),	7.7	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: S

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: S1

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** S1

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage S1

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet | Width (ft) and/or | Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: S1

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for:	Ephemeral Flow	Average Flow Events per year:	1
Describe Flow Regime:	Ephemeral	Other Information on Duration and Volume:	
Surface Flow is:	Overland Sheetflow	Characteristics:	
Subsurface Flow:	No	Explain:	

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank	☐ Vegetation matted down, bent or absent
☑ Changes in soil character	☐ Leaf litter disturbed or washed away
☐ Shelving	☐ Presence of litter and debris
☑ Sediment deposition	☐ Destruction of terrestrial vegetation
☐ Sediment sorting	☐ Abrupt change in plant community
☐ Scour	☐ Multiple observed or predicted flow events
☐ Presence of wrack line	☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: S1

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: S1

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	3055	linear feet (ft),	2.6	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: S1

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: S1a

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** S1a

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage S1a

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: S1a

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: S1a

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: S1a

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1215	linear feet (ft),	2.8	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: S1a

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: S2

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** S2

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage S2

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: S2

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: S2

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: S2

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	546	linear feet (ft),	3.3	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: S2

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: S3

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** S3

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage S3

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: S3

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: S3

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: S3

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	2716	linear feet (ft),	4.7	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: S3

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: S4

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** S4

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage S4

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: S4

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: S4

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: S4

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	2439	linear feet (ft),	6.1	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: S4

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **S4a**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** **S4a**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage S4a

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: S4a

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: S4a

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: S4a

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1366	linear feet (ft),	3.0	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: S4a

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **T**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature T**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage T

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: T

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: T

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: T

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	5311	linear feet (ft),	2.4	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: T

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **T1**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature T1**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage T1

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: T1

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: T1

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: T1

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	4123	linear feet (ft),	3.3	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: T1

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: U

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature U**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage U

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: U

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: U

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: U

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	11409	linear feet (ft),	4.8	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: U

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: U1

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** U1

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage U1

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet | Width (ft) and/or | Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: U1

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: U1

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: U1

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1078	linear feet (ft),	2.6	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: U1

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: U4

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** U4

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage U4

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: U4

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: U4

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: U4

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	387	linear feet (ft),	2.0	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: U4

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: U5

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature U5**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage U5

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: U5

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: U5

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: U5

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	586	linear feet (ft),	3.0	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: U5

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: U7

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** U7

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage U7

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: U7

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: U7

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: U7

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	5072	linear feet (ft),	2.7	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: U7

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: U7a

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** U7a

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage U7a

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: U7a

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow

Average Flow Events per year: 1

Describe Flow Regime: Ephemeral

Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow

Characteristics:

Subsurface Flow: No

Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: U7a

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: U7a

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	611	linear feet (ft),	2.5	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: U7a

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: V

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature V**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage V

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: V

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: V

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: V

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	8612	linear feet (ft),	4.1	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: V

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: V1

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature V1**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage V1

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: V1

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: V1

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: V1

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	848	linear feet (ft),	2.3	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: V1

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: V3

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** V3

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage V3

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet | Width (ft) and/or | Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: V3

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: V3

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: V3

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1694	linear feet (ft),	2.1	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: V3

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: V5

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** V5

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage V5

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: V5

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: V5

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: V5

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1087	linear feet (ft),	1.8	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: V5

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **W**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature W**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage W

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: W

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: W

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: W

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	2584	linear feet (ft),	2.1	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: W

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: X

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** X

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage X

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: X

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: X

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: X

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	3768	linear feet (ft),	6.0	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: X

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **X1**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature X1**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage X1

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet | Width (ft) and/or | Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: X1

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: X1

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: X1

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	5339	linear feet (ft),	3.8	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: X1

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **X1b**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature X1b**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage X1b

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet | Width (ft) and/or | Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: X1b

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: X1b

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: X1b

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	2923	linear feet (ft),	7.7	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: X1b

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **X1bi**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature X1bi**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage X1bi

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: X1bi

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: X1bi

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: X1bi

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	829	linear feet (ft),	2.5	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: X1bi

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **X2**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature X2**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage X2

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: X2

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: X2

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: X2

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	3964	linear feet (ft),	4.6	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: X2

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: **X2a**

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature X2a**

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage X2a

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: X2a

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: X2a

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: X2a

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1828	linear feet (ft),	4.3	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: X2a

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD:

Feature ID: Y

SECTION I: BACKGROUND INFORMATION

A. Report Completion Date for Approved Jurisdictional Determination: August 15, 2012

B. District Office and File No: Los Angeles District, File No. Pending

C. Project Location and Background Information: **Drainage Feature** Y

City, County, State: Casa Grande, Pinal County, Arizona

Center coordinates of site: Lat. 32.984326 Long. -111.802358

Name of nearest waterbody: Unnamed Drainage Y

Name of nearest downstream TNW: Gila River between Powers Butte and Gillespie Dam

HUC Code: 15050303

☑ Map/Diagram of potential jurisdictional area is available on request

D. Review Performed for Site Evaluation:

Office Determination. Date:

Field Determination. Date: June 29, 2012

SECTION II: SUMMARY OF FINDINGS

A. RHA Section 10 Determination of Jurisdiction

There Are No "navigable waters of the U.S." within RHA jurisdiction in the review area.

B. CWA Section 404 Determination of Jurisdiction

There Are No "waters of the U.S." within CWA jurisdiction in the review area.

1. Waters of the US:

Linear Feet Width (ft) and/or Acres

Limits of Jurisdiction based on:

2. Non-Regulated Waters/Wetlands:

☑ Potentially jurisdictional waters and/or wetlands were assessed and determined not to be jurisdictional:

Ephemeral drainage exhibits indicators of an OHWM, but was determined not to have a significant nexus to TNWs, based on: distance to TNW; low frequency and amount of flow; rapid dissipation of stormwater through high evaporation, low precipitation, high soil permeability, and water uptake by vegetation; effects of intervening manmade channels, impoundments, and agricultural land uses; and lack of lifecycle support functions for aquatic species in TNWs. Consequently, they do not have more than an insubstantial or speculative effect on the physical, chemical, or biological integrity of TNWs (see Section III.C).

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

1. Identified TNW:

Rationale for TNW determination:

2. Rationale for conclusion that any wetlands present are "adjacent":

B. CHARACTERISTICS OF NON-TNW TRIBUTARY AND ITS ADJACENT WETLANDS

TNW Watershed Size (sq mi):	49650	Tributaries flow to TNW:	4
Drainage Area (sq mi):	297.0000	River Miles from tributary to TNW:	30 (or more)
Average Annual Rainfall (in):	8.35	River Miles from tributary to RPW:	
Average Annual Snowfall (in):		Aerial Miles from tributary to TNW:	30 (or more)
		Aerial Miles from tributary to RPW:	

☐ Project waters cross or serve as state boundaries. Explain:

Feature ID: Y

Identify flow route to TNW:

Project area drainages flow to the North Branch Santa Cruz Wash to the Santa Cruz Wash, which is interrupted by approximately 13 miles (in a straight line) of agricultural area, to the Gila River.

Tributary is: Natural Explain:

Average Width (ft):

Average Depth (ft):

Average Side Slopes: 4:1 (or greater)

Primary tributary substrate composition (check all that apply):

☑ Silts ☑ Sands ☐ Cobbles ☐ Bedrock ☑ Gravel ☐ Vegetation

☐ Concrete ☐ Muck Other, Explain:

Tributary Condition/Stability. Explain: Stable

Presence of Run/Riffle/Pool Complexes. Explain: Not present.

Tributary Geometry: Relatively Straight

Tributary Gradient (approximate average slope):

(c) Flow:

Tributary Provides for: Ephemeral Flow Average Flow Events per year: 1

Describe Flow Regime: Ephemeral Other Information on Duration and Volume:

Surface Flow is: Overland Sheetflow Characteristics:

Subsurface Flow: No Explain:

Tributary Has:

☑ Bed and Banks

☑ OHWM: OHWM Indicators:

☐ Clear, natural line impressed on the bank
☑ Changes in soil character
☐ Shelving
☑ Sediment deposition
☐ Sediment sorting
☐ Scour
☐ Presence of wrack line
☐ Vegetation matted down, bent or absent
☐ Leaf litter disturbed or washed away
☐ Presence of litter and debris
☐ Destruction of terrestrial vegetation
☐ Abrupt change in plant community
☐ Multiple observed or predicted flow events
☐ Water staining

Other (list):

☐ Discontinuous? Explain:

(iii) Chemical Characteristics:

Characterize Tributary:

Identify Specific Pollutants, if known:

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

☐ Riparian Corridor Characteristics:

☐ Wetland Fringe Characteristics:

Habitat for:

☐ Federally Listed Species Explain:

☐ Fish/Spawn Areas Explain:

☐ Other environmentally -sensitive species Explain:

☐ Aquatic/Wildlife diversity Explain:

Feature ID: Y

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

(i) Physical Characteristics:

Wetland Size (ac): Wetland Type, Explain:

Wetland Quality, Explain:

Project Wetlands Cross or Serve as State Boundaries, Explain:

Wetland Flow is: Explain:

Surface Flow is: Characteristics:

Subsurface Flow: Explain Findings:

☐ Wetland Directly Abutting Non-TNW

☐ Wetland Not Directly Abutting Non-TNW

- ☐ Discrete wetland hydrologic connection Explain:
- ☐ Ecologcal connection Explain:
- ☐ Separated by berm/barrier Explain:

Project Wetlands: River Miles from TNW:

Project Wetlands: Aerial Miles from TNW:

Flow is From:

Approximate Location of Wetland within Floodplain:

(ii) Chemical Characteristics:

Characterize Wetland System:

(iii) Biological Characteristics. Wetland supports (check all that apply):

☐ Riparian Buffer Explain:

☐ Vegetation type/percent cover. Explain:

Habitat for:

- ☐ Federally Listed Species Explain:
- ☐ Fish/Spawn Areas Explain:
- ☐ Other environmentally-sensitive species Explain:
- ☐ Aquatic/Wildlife Diversity Explain:

3. Characteristics of all wetlands adjacent to the non-TNW tributary (if any)

All wetland(s) considered in cumulative analysis:

Wetland acres in total being considered in cumulative analysis:

Describe each wetland (directly abuts tributary?; size in acres; overall biological, chemical or physical functions):

C. SIGNIFICANT NEXUS DETERMINATION

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNW. Explain:

The Copper Mountain Ranch project area drains to the North Branch Santa Cruz Wash to Santa Cruz Wash to the Gila River. In total, the project area is approximately 80 ephemeral 'river' miles from the reach of the Gila River designated as the TNW. With the exception of the intermittent flow created by effluent discharge into the Gila River, the entire length of this flow path consists of ephemeral drainages. The flow path is highly discontinuous, interrupted by numerous levees, diversions, stock tanks, channels, agricultural fields, canals, road crossings, and other constructed features. The likelihood that stormwater originating in the project area is conveyed downgradient to the TNW is extremely remote. The largest and most obvious disruption in the flow path is the thirteen miles of agricultural production along the course of the Santa Cruz Wash. In addition, the arid climate, high evaporation rate, and permeable soils lead to rapid evaporation and infiltration of stormwater flows within the project area and at many of the constructed features that detain

Feature ID: Y

or interrupt stormwater flows. In summary, the Copper Mountain Ranch project area does not contain any drainages that have characteristics, functions, or values having more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of the downstream TNW, and are therefore not waters of the U.S. (WestLand Resources 2012).

2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNW. Explain:

3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE

1. TNWs and Adjacent Wetlands

☐ TNWs: Linear Feet Width (ft), Or, Acres

☐ Wetlands adjacent to TNWs Acres

Reserved for Section III D 2 (RPWs):

3. Non-RPWs that flow directly or indirectly into TNWs.

☐ Non-TNW/non-RPW waterbody that flows directly or indirectly into a TNW and has a signficant nexus with a TNW, and is therfore jurisdictional.

Length (Linear Feet): Width (feet): Acres:

Reserved for Section III D 4 (Wetlands directly abutting RPWs):

Reserved for Section III D 5 (Wetlands adjacent to but not directly abutting RPWs):

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

☐ Wetland adjacent to non-RPWs which, in combination with the tributary and other adjacent wetlands, has a significant nexus with the TNW.

Estimated size of jurisdictional wetland (in acres):

7. Impoundments of jurisdictional waters.

Demonstration of Jurisdiction:

E. ISOLATED WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE

Supporting rationale:

Length (linear feet): Acres:

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS:

Non-Jurisdictional Waters:

Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction.

Explain finding of no Significant Nexus:

See Section III.C.1.

☑ Non-wetland waters	1828	linear feet (ft),	1.9	width (ft)
☐ Other waters		acres		
☐ Wetlands		acres		

Feature ID: Y

SECTION IV: DATA SOURCES

- [x] Maps, Plans, Plots or Plat Submitted by Applicant/Consultant: WestLand Resources, Inc.
- [x] Data Sheets Prepared/Submitted on behalf of Applicant
  - [ ] Office Concurs with delineation
  - [ ] Office Does Not Concur with delineation
- [ ] Data Sheets Prepared by the Corps
- [ ] Corps Navigable Water Study
- [x] US Geological Survey Hydrologic Atlas
  - [x] USGS NHD Data
  - [x] USGS 8 and 12 digit HUC Map
- [x] US Geological Survey Map(s) Scale and Quad Name: Casa Grande 7.5-Minute Quadrangle
- [x] USDA Nat'l Res Conservation Service Soil Survey Citation: Web Soil Survey, 08/01/2012
- [ ] National Wetlands Inventory Maps Cite Map Name:
- [ ] State/Local Wetland Inventory Maps
- [ ] FEMA/FIR Maps 04021C 1175E, 12/4/2007
- [ ] 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- [x] Aerial Photographs (Name and Date): BING Aerial Photography, 2010
- [x] Other Photographs (Name and Date): Ground Photos;June 29, 2012
- [x] Previous Determinations File No. and Date of Response Letter: Corps File No. 974-0202-SDM
- [ ] Applicable/Supporting Case Law Citation:
- [ ] Applicable/Supporting Scientific Literature Citation:

Other Information, Please Specify:

Additional Comments to Support JD: