

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

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

SECTION I: BACKGROUND INFORMATION

- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** January 31, 2012
- B. DISTRICT OFFICE:** San Francisco District **FILE NUMBER:** 290935
File Name: Diamond A Ranch
Waterbody Name: Drainage D11
- C. PROJECT LOCATION AND BACKGROUND INFORMATION:**
State: California County/parish/borough: Alameda Co. City:
(lat/long (in degree decimal format): Lat: 37.550604 N Long: -121.835477 W
Pick List (lat/long (in degree decimal format): Lat: Pick Long: Pick
Pick List (lat/long (in degree decimal format): Lat: Pick Long: Pick
Universal Transverse Mercator: UTM Zone 10
Name of nearest waterbody: South Fork Apperson Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: San Antonio Reservoir
Name of watershed or Hydrologic Unit Code (HUC): San Francisco Bay, 18050004
 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request
 Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
- D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**
 Office (Desk) Determination. Date:
 Field Determination. Date(s): May 25, 2011

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required].

- Waters subject to the ebb and flow of the tide.
 Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. **Explain:**

B. CWA SECTION 404 DETERMINATION OF JURISDICTION

There are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S:

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
 Wetlands adjacent to TNWs
 Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
 Non-RPWs that flow directly or indirectly into TNWs
 Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
 Impoundments of jurisdictional waters
 Isolated (interstate or intrastate) waters, including isolated wetlands

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

Non-wetland waters: 783 linear feet: 1 width (ft) and/or acres. (other comments:)

Wetlands: acres. (other comments:)

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

Elevation of established OHWM (if known):

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

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

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

³ Supporting documentation is presented in Section III.F.

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

SECTION III: CWA ANALYSIS

A TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW
Identify TNW:
Summarize rationale supporting determination that waterbody is a TNW:
2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is “adjacent”:

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

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

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

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

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

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

- (i) General Area Conditions:
 - Watershed size: 1.5 square miles
 - Drainage area: .02 acres
 - Average annual rainfall: 24 inches
 - Average annual snowfall: 0 inches
- (ii) Physical Characteristics:
 - a. **Relationship with TNW:**
 - Tributary flows directly into TNW
 - Tributary flows through 2 tributaries before entering TNW
 - Project waters are 1 (or less) river miles from TNW.
 - Project waters are 1 (or less) river miles from RPW.
 - Project waters are 1 (or less) aerial (straight) miles from TNW.
 - Project waters are 1 (or less) aerial (straight) miles from RPW.
 - Project waters cross or serve as a state boundary. *Explain:*
 - Identify flow route to TNW⁵: Project waters D11 flows into Drainage D14 which is a tributary to D15, the South Fork Apperson Creek that flows into the San Antonio Reservoir
 - Tributary stream order, if known:
 - b. **General Tributary Characteristics (check all that apply)::**

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

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

Tributary is:

- Natural: (comment if needed)
- Artificial (man-made): **Explain:**
- Manipulated (man-altered): **Explain:**

Tributary properties with respect to top of bank (*estimate*):

Average width: **1** feet (measured from top of bank to top of bank)
Average depth: feet. (measured from OHWM to top of bank)
Average side slopes: **Pick List**

Primary tributary substrate composition (check all that apply):

- Silt:
- Sand:
- Clay:
- Cobbles:
- Gravel:
- Muck:
- Bedrock:
- Concrete:
- Vegetation (Type / % cover):
- Other (Explain):

Tributary condition/stability [e.g., highly eroding, sloughing banks]. **Explain:** .

Presence of run/riffle/pool complexes. **Explain:** .

Tributary geometry: **Pick List**.

Tributary gradient (approximate average slope): %

c. FLOW INFORMATION

Tributary provides for: **Seasonal flow**

Estimate average number of flow events in review area/year: **20 (or greater)**

Describe flow regime: **The unnamed drainage D11 has seasonal flow.**

Other information on duration and volume: .

Surface flow is: **discrete and confined**. Characteristics: .

Subsurface flow: **Pick List. Explain findings:** .

- Dye (or other) test performed: .

Tributary has (check all that apply):

- Bed and banks
- OHWM⁶ (check all indicators that apply):
 - clear, natural line impressed on the bank
 - changes in the character of soil
 - destruction of terrestrial vegetation
 - vegetation matted down, bent, or absent
 - leaf litter disturbed or washed away
 - multiple observed or predicted flow events
 - water staining
 - abrupt change in plant community. **Explain:**
 - other (list):
- the presence of litter and debris
- shelving
- the presence of wrack line
- sediment sorting
- scour
- sediment deposition

- Discontinuous OHWM.⁷ **Explain:**

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (**check all that apply**):

- High Tide Line indicated by: **OR** Mean High Water Mark indicated by:
 - oil or scum line along shore objects
 - fine shell or debris deposits (foreshore)
 - physical markings/characteristics
 - survey to available datum
 - physical markings
 - vegetation lines/changes in vegetation types

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

⁷Ibid.

- tidal gauges
- other (*list*):

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). *Explain:* .

Identify specific pollutants, if known:

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

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. *Explain findings:*
 - Fish/spawn areas. *Explain findings:*
 - Other environmentally-sensitive species. *Explain findings:*
 - Aquatic/wildlife diversity. *Explain findings:*

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

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties

Wetland size: acres

Wetland type. *Explain:*

Wetland quality. *Explain:*

Project wetlands cross or serve as state boundaries. *Explain:*

(b) General Flow Relationship with Non-TNW:

Flow is: [Pick List](#) *Explain:*

Surface flow is: [Pick List](#)

Characteristics:

Subsurface flow: [Pick List](#) *Explain findings:*

- Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

- Directly abutting
- Not directly abutting
 - Discrete wetland hydrologic connection. *Explain:*
 - Ecological connection. *Explain:*
 - Separated by berm / barrier. *Explain:*

(d) Proximity (Relationship) to TNW

Project wetlands are [Pick List](#) river miles from TNW.

Project waters are: [Pick List](#) aerial (straight) miles from TNW.

Flow is from: [Pick List](#)

Estimate approximate location of wetland as within the: [Pick List](#) floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). *Explain:*

Identify specific pollutants, if known: *Explain:*

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

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. *Explain:*
- Habitat for:
 - Federally Listed species. *Explain findings:*
 - Fish/spawn areas. *Explain findings:*
 - Other environmentally-sensitive species. *Explain findings:*

Aquatic/wildlife diversity. *Explain findings:*

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

- (i) All wetland(s) being considered in the cumulative analysis: [Pick List](#)
- (ii) Approximately () acres in total are being considered in the cumulative analysis.

(iii) For each wetland associated with the reach or waterbody being analyzed in this form, specify the following:

Number/Name ⁸	Directly abuts (Yes/No)	Size
	Pick	acres

- (iv) Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** *Explain* findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** *Explain* findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

⁸ In the Number/Name column, add the number and/or name that you have given the wetland being referred to in the table. Example, you are referring to a wetland on your wetland delineation map number 6, that you call wetland No.3 on a reach you refer to as Putah Creek. For this wetland you would add to the table in the Number/Name column, something like the following: (No. 3, Putah Ck., Map # 6).

Ephemeral streams, such as drainage D11 provide the necessary water source for maintaining adequate water levels of downstream traditional navigable waters. Ephemeral streams also have the ability to carry pollutants and flood waters that may influence water quality of downstream traditional navigable waters. In addition, allochthonous energy inputs are a dominant component of the food base in ephemeral streams that will provide the food source for aquatic organisms (i.e. micro-invertebrates, macro-invertebrates, and fishes) in the downstream traditional navigable waters. The downstream traditional navigable water of San Antonio Reservoir is approximately half a mile to the north. San Antonio Reservoir is part of the from the Hetch Hetchy Aqueduct and is the municipal water supply for San Francisco County. No specific studies have been completed on the project site to determine the magnitude at which the above mentioned functions and values are being performed.

3 Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

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

- 1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
 - TNWs: linear feet width (ft), and/or acres.
 - Wetlands adjacent to TNWs: acres.

- 2. **RPWs that flow directly or indirectly into TNWs.**
 - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
 - Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (*check all that apply*)

 - Tributary waters: linear feet width (ft).
 - Other non-wetland waters: acres.

Identify type(s) of waters: .

- 3. **Non-RPWs⁹ that flow directly or indirectly into TNWs.**
 - Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (*check all that apply*):

 - Tributary waters: 783 linear feet 1 width (ft).
 - Other non-wetland waters: acres.

Identify type(s) of waters: .

- 4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
 - Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 - Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in **Section III.D.2**, above. Provide rationale indicating that wetland is directly abutting an RPW: .
 - Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in **Section III.B** and rationale in **Section III.D.2**, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

- 5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**

⁹See Footnote # 3.
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- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at **Section III.C.**

Provide acreage estimates for jurisdictional wetlands in the review area: _____ acres.

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

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at **Section III.C.**

Provide estimates for jurisdictional wetlands in the review area: _____ acres.

7. Impoundments of jurisdictional waters.¹⁰

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from “waters of the U.S.,” or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹¹

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: _____.
- Other factors. Explain: _____.

Identify water body and summarize rationale supporting determination: _____.

Provide estimates for jurisdictional waters in the review area (*check all that apply*)

- Tributary waters: _____ linear feet _____ width (ft).
- Other non-wetland waters: _____ acres.
Identify type(s) of waters: _____.
- Wetlands: _____ acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in “SWANCC,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).
- Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. **Explain:** _____.
- Other: (explain, if not covered above): _____.

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (*check all that apply*):

- Non-wetland waters (i.e., rivers, streams): _____ linear feet _____ width (ft).

¹⁰ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹¹ **Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.**

- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.
-

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: *Office concurs with revised delineation of October 2011 and further revision of January 2012 that maps features in black and white.*
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report. *Office concurs with revised delineation of October 2011 and further revision of January 2012 that maps features in black and white.*
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: *See January 2012 memo to the file regarding May 25, 2011 site visit.*
- Corps navigable waters' study: .
- U.S. Geological Survey Hydrologic Atlas: .
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: .
- USDA Natural Resources Conservation Service Soil Survey. Citation: .
- National wetlands inventory map(s). Cite name: .
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): .
 - Other (Name & Date): .
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): .
-

B. ADDITIONAL COMMENTS TO SUPPORT JD:

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

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

SECTION I: BACKGROUND INFORMATION

- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** January 31, 2012
- B. DISTRICT OFFICE:** San Francisco District **FILE NUMBER:** 290935
File Name: Diamond A Ranch
Waterbody Name: Drainage D12
- C. PROJECT LOCATION AND BACKGROUND INFORMATION:**
State: California County/parish/borough: Alameda Co. City:
(lat/long (in degree decimal format): Lat: 37.551305 N Long: -121.834662 W
Pick List (lat/long (in degree decimal format): Lat: Pick Long: Pick
Pick List (lat/long (in degree decimal format): Lat: Pick Long: Pick
Universal Transverse Mercator: UTM Zone 10
Name of nearest waterbody: South Fork Apperson Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: San Antonio Reservoir
Name of watershed or Hydrologic Unit Code (HUC): San Francisco Bay, 18050004
 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request
 Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
- D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**
 Office (Desk) Determination. Date:
 Field Determination. Date(s): May 25, 2011

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required].

- Waters subject to the ebb and flow of the tide.
 Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. **Explain:**

B. CWA SECTION 404 DETERMINATION OF JURISDICTION

There are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S:

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
 Wetlands adjacent to TNWs
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 Non-RPWs that flow directly or indirectly into TNWs
 Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
 Impoundments of jurisdictional waters
 Isolated (interstate or intrastate) waters, including isolated wetlands

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

Non-wetland waters: 166 linear feet: 2 width (ft) and/or acres. (other comments:)
Wetlands: acres. (other comments:)

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

Elevation of established OHWM (if known):

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

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

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

³ Supporting documentation is presented in Section III.F.

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

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A TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW
Identify TNW:
Summarize rationale supporting determination that waterbody is a TNW:
2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is “adjacent”:

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

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

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

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

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

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

- (i) General Area Conditions:
 - Watershed size: **appr. 1.5 square miles**
 - Drainage area: **0.01 acres**
 - Average annual rainfall: **24 inches**
 - Average annual snowfall: **0 inches**
- (ii) Physical Characteristics:
 - a. **Relationship with TNW:**
 - Tributary flows directly into TNW
 - Tributary flows through **3** tributaries before entering TNW
 - Project waters are **1 (or less)** river miles from TNW.
 - Project waters are **1 (or less)** river miles from RPW.
 - Project waters are **1 (or less)** aerial (straight) miles from TNW.
 - Project waters are **1 (or less)** aerial (straight) miles from RPW.
 - Project waters cross or serve as a state boundary. *Explain:*
 - Identify flow route to TNW⁵: **Project waters D12 flows into Drainage D14 which is a tributary to D15, the South Fork Apperson Creek that flows into the San Antonio Reservoir.**
 - Tributary stream order, if known:
 - b. **General Tributary Characteristics (check all that apply)::**

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

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

Tributary is:

- Natural: (comment if needed)
- Artificial (man-made): **Explain:**
- Manipulated (man-altered): **Explain:**

Tributary properties with respect to top of bank (*estimate*):

Average width: 4 feet (measured from top of bank to top of bank)
Average depth: feet. (measured from OHWM to top of bank)
Average side slopes: [Pick List](#)

Primary tributary substrate composition (check all that apply):

- Silt:
- Sand:
- Clay:
- Cobbles:
- Gravel:
- Muck:
- Bedrock:
- Concrete:
- Vegetation (Type / % cover):
- Other (Explain):

Tributary condition/stability [e.g., highly eroding, sloughing banks]. **Explain:** .

Presence of run/riffle/pool complexes. **Explain:** .

Tributary geometry: [Pick List](#).

Tributary gradient (approximate average slope): %

c. FLOW INFORMATION

Tributary provides for: [Seasonal flow](#)

Estimate average number of flow events in review area/year: 20 (or greater)

Describe flow regime: [The unnamed drainage D12 has seasonal flow.](#)

Other information on duration and volume: .

Surface flow is: [discrete and confined](#). Characteristics: .

Subsurface flow: [Pick List](#). **Explain findings:** .

- Dye (or other) test performed: .

Tributary has (check all that apply):

- Bed and banks
- OHWM⁶ (check all indicators that apply):
 - clear, natural line impressed on the bank
 - changes in the character of soil
 - destruction of terrestrial vegetation
 - vegetation matted down, bent, or absent
 - leaf litter disturbed or washed away
 - multiple observed or predicted flow events
 - water staining
 - abrupt change in plant community. **Explain:**
 - other (list):
- the presence of litter and debris
- shelving
- the presence of wrack line
- sediment sorting
- scour
- sediment deposition

- Discontinuous OHWM.⁷ **Explain:**

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (**check all that apply**):

- High Tide Line indicated by: **OR** Mean High Water Mark indicated by:
 - oil or scum line along shore objects
 - fine shell or debris deposits (foreshore)
 - physical markings/characteristics
 - survey to available datum
 - physical markings
 - vegetation lines/changes in vegetation types

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

⁷Ibid.

- tidal gauges
- other (*list*):

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). *Explain:* .

Identify specific pollutants, if known:

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

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. *Explain findings:*
 - Fish/spawn areas. *Explain findings:*
 - Other environmentally-sensitive species. *Explain findings:*
 - Aquatic/wildlife diversity. *Explain findings:*

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

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties

Wetland size: acres

Wetland type. *Explain:*

Wetland quality. *Explain:*

Project wetlands cross or serve as state boundaries. *Explain:*

(b) General Flow Relationship with Non-TNW:

Flow is: [Pick List](#) *Explain:*

Surface flow is: [Pick List](#)

Characteristics:

Subsurface flow: [Pick List](#) *Explain findings:*

- Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

- Directly abutting
- Not directly abutting
 - Discrete wetland hydrologic connection. *Explain:*
 - Ecological connection. *Explain:*
 - Separated by berm / barrier. *Explain:*

(d) Proximity (Relationship) to TNW

Project wetlands are [Pick List](#) river miles from TNW.

Project waters are: [Pick List](#) aerial (straight) miles from TNW.

Flow is from: [Pick List](#)

Estimate approximate location of wetland as within the: [Pick List](#) floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). *Explain:*

Identify specific pollutants, if known: *Explain:*

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

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. *Explain:*
- Habitat for:
 - Federally Listed species. *Explain findings:*
 - Fish/spawn areas. *Explain findings:*
 - Other environmentally-sensitive species. *Explain findings:*

Aquatic/wildlife diversity. *Explain findings:*

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

- (i) All wetland(s) being considered in the cumulative analysis: [Pick List](#)
- (ii) Approximately () acres in total are being considered in the cumulative analysis.

(iii) For each wetland associated with the reach or waterbody being analyzed in this form, specify the following:

Number/Name ⁸	Directly abuts (Yes/No)	Size
	Pick	acres

- (iv) Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D

⁸ In the Number/Name column, add the number and/or name that you have given the wetland being referred to in the table. Example, you are referring to a wetland on your wetland delineation map number 6, that you call wetland No.3 on a reach you refer to as Putah Creek. For this wetland you would add to the table in the Number/Name column, something like the following: (No. 3, Putah Ck., Map # 6).

Ephemeral streams, such as drainage D12 provide the necessary water source for maintaining adequate water levels of downstream traditional navigable waters. Ephemeral streams also have the ability to carry pollutants and flood waters that may influence water quality of downstream traditional navigable waters. In addition, allochthonous energy inputs are a dominant component of the food base in ephemeral streams that will provide the food source for aquatic organisms (i.e. micro-invertebrates, macro-invertebrates, and fishes) in the downstream traditional navigable waters. The downstream traditional navigable water of San Antonio Reservoir is approximately half a mile to the north. San Antonio Reservoir is part of the from the Hetch Hetchy Aqueduct and is the municipal water supply for San Francisco County. No specific studies have been completed on the project site to determine the magnitude at which the above mentioned functions and values are being performed.

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** *Explain* findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

3 **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** *Explain* findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:

- TNWs: linear feet width (ft), and/or acres.
- Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**

- Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
- Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (*check all that apply*):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.

Identify type(s) of waters: .

3. **Non-RPWs⁹ that flow directly or indirectly into TNWs.**

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (*check all that apply*):

- Tributary waters: 166 linear feet 2 width (ft).
- Other non-wetland waters: acres.

Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 - Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in **Section III.D.2**, above. Provide rationale indicating that wetland is directly abutting an RPW: .
 - Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in **Section III.B** and rationale in **Section III.D.2**, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

⁹See Footnote # 3.
ud080207 HED

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at **Section III.C.**

Provide acreage estimates for jurisdictional wetlands in the review area: _____ acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at **Section III.C.**

Provide estimates for jurisdictional wetlands in the review area: _____ acres.

7. Impoundments of jurisdictional waters.¹⁰

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from “waters of the U.S.,” or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (*CHECK ALL THAT APPLY*):¹¹

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: _____.
- Other factors. Explain: _____.

Identify water body and summarize rationale supporting determination: _____.

Provide estimates for jurisdictional waters in the review area (*check all that apply*)

- Tributary waters: _____ linear feet _____ width (ft).
- Other non-wetland waters: _____ acres.
- Identify type(s) of waters: _____.
- Wetlands: _____ acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
- Prior to the Jan 2001 Supreme Court decision in “SWANCC,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).
- Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. **Explain:** _____.
- Other: (explain, if not covered above): _____.

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (*check all that apply*):

¹⁰ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹¹ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.
-

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: *Office concurs with revised delineation of October 2011 and further revision of January 2012 that maps features in black and white.*
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report. *Office concurs with revised delineation of October 2011 and further revision of January 2012 that maps features in black and white.*
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: *See January 2012 memo to the file regarding May 25, 2011 site visit.*
- Corps navigable waters' study: .
- U.S. Geological Survey Hydrologic Atlas: .
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: .
- USDA Natural Resources Conservation Service Soil Survey. Citation: .
- National wetlands inventory map(s). Cite name: .
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): .
 - Other (Name & Date): .
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): .
-

B. ADDITIONAL COMMENTS TO SUPPORT JD:

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): January 31, 2012

B. DISTRICT OFFICE: San Francisco District **FILE NUMBER:** 290935

File Name: Diamond A Ranch

Waterbody Name: Drainage D13

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: California County/parish/borough: Alameda Co. City:

(lat/long (in degree decimal format): Lat: 37.555953 N Long: -121.837888 W

Pick List (lat/long (in degree decimal format): Lat: Pick Long: Pick

Pick List (lat/long (in degree decimal format): Lat: Pick Long: Pick

Universal Transverse Mercator: UTM Zone 10

Name of nearest waterbody: San Antonio Reservoir

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: San Antonio Reservoir

Name of watershed or Hydrologic Unit Code (HUC): San Francisco Bay, 18050004

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date:

Field Determination. Date(s): May 25, 2011

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required].

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. **Explain:**

B. CWA SECTION 404 DETERMINATION OF JURISDICTION

There are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.:

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs

Non-RPWs that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

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

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

Impoundments of jurisdictional waters

Isolated (interstate or intrastate) waters, including isolated wetlands

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

Non-wetland waters: 911 linear feet: 3 width (ft) and/or 0.02 acres. (other comments: Abandoned stockpond SP3 has been constructed at the headwaters of Drainage D13.)

Wetlands: 0.03 acres. (other comments: wetlands, W10 and W11 are at the headwaters of D13)

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

Elevation of established OHWM (if known):

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

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

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

³ Supporting documentation is presented in Section III.F.

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

SECTION III: CWA ANALYSIS

A TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW
Identify TNW:
Summarize rationale supporting determination that waterbody is a TNW:
2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is “adjacent”:

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

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

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

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

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

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

- (i) General Area Conditions:
 - Watershed size: .5 square miles
 - Drainage area: .06 acres
 - Average annual rainfall: 24 inches
 - Average annual snowfall: 0 inches
- (ii) Physical Characteristics:
 - a. **Relationship with TNW:**
 - Tributary flows directly into TNW
 - Tributary flows through 2 tributaries before entering TNW
 - Project waters are 1 (or less) river miles from TNW.
 - Project waters are 1 (or less) river miles from RPW.
 - Project waters are 1 (or less) aerial (straight) miles from TNW.
 - Project waters are 1 (or less) aerial (straight) miles from RPW.
 - Project waters cross or serve as a state boundary. *Explain:*
 - Identify flow route to TNW⁵: Project waters D13 flows northerly into an unnamed tributary of San Antonio Reservoir.
 - Tributary stream order, if known:
 - b. **General Tributary Characteristics (check all that apply)::**

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

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

Tributary is:

- Natural: (comment if needed)
- Artificial (man-made): **Explain:**
- Manipulated (man-altered): **Explain:** *Stockpond SP3 has been constructed at the headwaters of the drainage.*

Tributary properties with respect to top of bank (*estimate*):

Average width: **4** feet (measured from top of bank to top of bank)
Average depth: feet. (measured from OHWM to top of bank)
Average side slopes: **Pick List**

Primary tributary substrate composition (*check all that apply*):

- Silt:
- Sand:
- Clay:
- Cobbles:
- Gravel:
- Muck:
- Bedrock:
- Concrete:
- Vegetation (Type / % cover):
- Other (Explain):

Tributary condition/stability [e.g., highly eroding, sloughing banks]. **Explain:** .

Presence of run/riffle/pool complexes. **Explain:** .

Tributary geometry: **Pick List**.

Tributary gradient (approximate average slope): %

c. FLOW INFORMATION

Tributary provides for: **Seasonal flow**

Estimate average number of flow events in review area/year: **20 (or greater)**

Describe flow regime: *The unnamed drainage D13 has a well defined bed and bank (evident even with aerial photography) and an ordinary high water mark that within the mediterranean climate of the project site is associated with relatively permanent waters with seasonal flow.*

Other information on duration and volume: .

Surface flow is: **discrete and confined**. Characteristics: .

Subsurface flow: **Pick List**. **Explain findings:** .

- Dye (or other) test performed: .

Tributary has (check all that apply):

- Bed and banks
- OHWM⁶ (check all indicators that apply):
 - clear, natural line impressed on the bank
 - changes in the character of soil
 - destruction of terrestrial vegetation
 - vegetation matted down, bent, or absent
 - leaf litter disturbed or washed away
 - multiple observed or predicted flow events
 - water staining
 - abrupt change in plant community. **Explain:**
 - other (list):
- the presence of litter and debris
- shelving
- the presence of wrack line
- sediment sorting
- scour
- sediment deposition

- Discontinuous OHWM.⁷ **Explain:**

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (**check all that apply**):

- High Tide Line indicated by: **OR** Mean High Water Mark indicated by:
 - oil or scum line along shore objects
 - survey to available datum

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

⁷Ibid.

- | | |
|--|---|
| <input type="checkbox"/> fine shell or debris deposits (foreshore) | <input type="checkbox"/> physical markings |
| <input type="checkbox"/> physical markings/characteristics | <input type="checkbox"/> vegetation lines/changes in vegetation types |
| <input type="checkbox"/> tidal gauges | |
| <input type="checkbox"/> other (<i>list</i>): | |

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). *Explain:* .

Identify specific pollutants, if known:

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

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. *Explain findings:*
 - Fish/spawn areas. *Explain findings:*
 - Other environmentally-sensitive species. *Explain findings:*
 - Aquatic/wildlife diversity. *Explain findings:*

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

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties

Wetland size: acres

Wetland type. *Explain:*

Wetland quality. *Explain:*

Project wetlands cross or serve as state boundaries. *Explain:*

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List** *Explain:*

Surface flow is: **Pick List**

Characteristics:

Subsurface flow: **Pick List** *Explain findings:*

- Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

- Directly abutting
- Not directly abutting
 - Discrete wetland hydrologic connection. *Explain:*
 - Ecological connection. *Explain:*
 - Separated by berm / barrier. *Explain:*

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are: **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List**

Estimate approximate location of wetland as within the: **Pick List** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). *Explain:*

Identify specific pollutants, if known: *Explain:*

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

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. *Explain:*
- Habitat for:
 - Federally Listed species. *Explain findings:*

- Fish/spawn areas. *Explain findings:*
- Other environmentally-sensitive species. *Explain findings:*
- Aquatic/wildlife diversity. *Explain findings:*

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

- (i) All wetland(s) being considered in the cumulative analysis: 2
- (ii) Approximately (0.03) acres in total are being considered in the cumulative analysis.

(iii) For each wetland associated with the reach or waterbody being analyzed in this form, specify the following:

Number/Name ⁸	Directly abuts (Yes/No)	Size	
W10	No	0.02 acres	
W11	No	0.01 acres	
	Pick	acres	
	Pick	acres	
	Pick	acres	
	Pick	acres	
	Pick	acres	
	Pick	acres	

- (iv) Summarize overall biological, chemical and physical functions being performed: *The adjacent wetlands, W10 and W11 are seasonal wetlands. Seasonal wetlands have numerous functions and services such as to provide short-term water storage that reduces downstream flood peaks and long-term water storage that helps maintain and moderate stream flows. Seasonal wetlands also retain sediments and nutrients therefore limiting downstream sedimentation and nutrient loading. Increased sedimentation and nutrient loading has been shown to decrease the water quality of the aquatic resource, the downstream traditional navigable water, San Antonio Reservoir that is approximately half a mile to the north. San Antonio Reservoir is part of the from the Hetch Hetchy Aqueduct and is the municipal water supply for San Francisco County. No specific studies have been completed on the project site to determine the magnitude at which the above mentioned functions and values are being performed.*

C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

⁸ In the Number/Name column, add the number and/or name that you have given the wetland being referred to in the table. Example, you are referring to a wetland on your wetland delineation map number 6, that you call wetland No.3 on a reach you refer to as Putah Creek. For this wetland you would add to the table in the Number/Name column, something like the following: (No. 3, Putah Ck., Map # 6).

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** *Explain* findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** *Explain* findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** *Explain* findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

The adjacent wetlands W10 and W11 are seasonal wetlands. Seasonal wetlands have numerous functions and services such as to provide short-term water storage that reduces downstream flood peaks and long-term water storage that helps maintain and moderate stream flows. Seasonal wetlands also retain sediments and nutrients therefore limiting downstream sedimentation and nutrient loading. Increased sedimentation and nutrient loading has been shown to decrease the water quality of the aquatic resource, the downstream traditional navigable water, San Antonio Reservoir that is approximately half a mile to the north. San Antonio Reservoir is part of the from the Hetch Hetchy Aqueduct and is the municipal water supply for San Francisco County. No specific studies have been completed on the project site to determine the magnitude at which the above mentioned functions and values are being performed.

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
 - TNWs: linear feet width (ft), and/or acres.
 - Wetlands adjacent to TNWs: acres.
2. **RPWs that flow directly or indirectly into TNWs.**
 - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
 - Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: *The unnamed drainages D13 has a well defined bed and bank (evident even with aerial photography) and an ordinary high water mark that within the mediterranean climate of the project site is associated with relatively permanent waters with seasonal.* .
Provide estimates for jurisdictional waters in the review area (*check all that apply*)
 - Tributary waters: *514* linear feet *3* width (ft).
 - Other non-wetland waters: *0.02* acres.
 Identify type(s) of waters: *SP3 is an unvegetated stock pond that was constructed at the headwaters of D13. SP3 is considered abandoned, no longer in agricultural use (i.e. no grazing).*
3. **Non-RPWs⁹ that flow directly or indirectly into TNWs.**
 - Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
Provide estimates for jurisdictional waters within the review area (*check all that apply*):
 - Tributary waters: linear feet width (ft).
 - Other non-wetland waters: acres.
 Identify type(s) of waters: .
4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
 - Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.

⁹See Footnote # 3.
ud080207 HED

- Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in **Section III.D.2**, above. Provide rationale indicating that wetland is directly abutting an RPW: .
- Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in **Section III.B** and rationale in **Section III.D.2**, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at **Section III.C**.

Provide acreage estimates for jurisdictional wetlands in the review area: **0.03** acres.

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

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at **Section III.C**.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters.¹⁰

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from “waters of the U.S.,” or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (*CHECK ALL THAT APPLY*):¹¹

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: .
- Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (*check all that apply*)

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
Identify type(s) of waters: .
- Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.

¹⁰ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹¹ **Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.**

- Prior to the Jan 2001 Supreme Court decision in “SWANCC,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).
- Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. **Explain:**
- Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (**check all that apply**):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.
-

SECTION IV: DATA SOURCES.

- A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: *Office concurs with revised delineation of October 2011 and further revision of January 2012 that maps features in black and white.*
 - Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report. *Office concurs with revised delineation of October 2011 and further revision of January 2012 that maps features in black and white.*
 - Office does not concur with data sheets/delineation report.
 - Data sheets prepared by the Corps: *See January 2012 memo to the file regarding May 25, 2011 site visit.*
 - Corps navigable waters’ study: .
 - U.S. Geological Survey Hydrologic Atlas: .
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
 - U.S. Geological Survey map(s). Cite scale & quad name: .
 - USDA Natural Resources Conservation Service Soil Survey. Citation: .
 - National wetlands inventory map(s). Cite name: .
 - State/Local wetland inventory map(s): .
 - FEMA/FIRM maps: .
 - 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
 - Photographs: Aerial (Name & Date): .
 - Other (Name & Date): .
 - Previous determination(s). File no. and date of response letter: .
 - Applicable/supporting case law: .
 - Applicable/supporting scientific literature: .
 - Other information (please specify): .
 -

B. ADDITIONAL COMMENTS TO SUPPORT JD:



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

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

SECTION I: BACKGROUND INFORMATION

- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** January 31, 2012
- B. DISTRICT OFFICE:** San Francisco District **FILE NUMBER:** 290935
File Name: Diamond A Ranch
Waterbody Name: Drainages D14
- C. PROJECT LOCATION AND BACKGROUND INFORMATION:**
State: California County/parish/borough: Alameda Co. City:
(lat/long (in degree decimal format): Lat: 37.551557 N Long: -121.833304 W
Pick List (lat/long (in degree decimal format): Lat: Pick Long: Pick
Pick List (lat/long (in degree decimal format): Lat: Pick Long: Pick
Universal Transverse Mercator: UTM Zone 10
Name of nearest waterbody: San Antonio Reservoir
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: San Antonio Reservoir
Name of watershed or Hydrologic Unit Code (HUC): San Francisco Bay, 18050004
 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request
 Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
- D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**
 Office (Desk) Determination. Date:
 Field Determination. Date(s): May 25, 2011

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required].

- Waters subject to the ebb and flow of the tide.
 Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. **Explain:**

B. CWA SECTION 404 DETERMINATION OF JURISDICTION

There are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S:

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
 Wetlands adjacent to TNWs
 Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
 Non-RPWs that flow directly or indirectly into TNWs
 Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
 Impoundments of jurisdictional waters
 Isolated (interstate or intrastate) waters, including isolated wetlands

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

Non-wetland waters: 1204 linear feet: 2-4 width (ft) and/or 0.03 acres. (other comments: Drainage D14 has an impoundment of an abandoned, un-vegetated stock pond SP4 (i.e. other water).)

Wetlands: acres. (other comments:)

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

Elevation of established OHWM (if known):

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

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

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

³ Supporting documentation is presented in Section III.F.

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

SECTION III: CWA ANALYSIS

A TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW
Identify TNW:
Summarize rationale supporting determination that waterbody is a TNW:
2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is “adjacent”:

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

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

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

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

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

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

- (i) General Area Conditions:
Watershed size: **approximately 1.5 square miles**
Drainage area: **0.08 acres**
Average annual rainfall: **24 inches**
Average annual snowfall: **0 inches**
- (ii) Physical Characteristics:
 - a. **Relationship with TNW:**
 Tributary flows directly into TNW
 Tributary flows through **2** tributaries before entering TNW

Project waters are **1 (or less)** river miles from TNW.
Project waters are **1 (or less)** river miles from RPW.
Project waters are **1 (or less)** aerial (straight) miles from TNW.
Project waters are **1 (or less)** aerial (straight) miles from RPW.
Project waters cross or serve as a state boundary. *Explain:*

Identify flow route to TNW⁵: **D14 that flows northeasterly into the South Fork of Apperson Creek, a tributary of San Antonio Reservoir.**
Tributary stream order, if known:
 - b. **General Tributary Characteristics (check all that apply)::**

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

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

Tributary is:

- Natural: (comment if needed)
- Artificial (man-made): **Explain:**
- Manipulated (man-altered): **Explain:** D14 has an instream, abandoned stock pond.

Tributary properties with respect to top of bank (*estimate*):

Average width: 2 feet (measured from top of bank to top of bank)
Average depth: feet. (measured from OHWM to top of bank)
Average side slopes: Pick List

Primary tributary substrate composition (check all that apply):

- Silt:
- Sand:
- Clay:
- Cobbles:
- Gravel:
- Muck:
- Bedrock:
- Concrete:
- Vegetation (Type / % cover):
- Other (Explain):

Tributary condition/stability [e.g., highly eroding, sloughing banks]. **Explain:** .

Presence of run/riffle/pool complexes. **Explain:** .

Tributary geometry: Pick List.

Tributary gradient (approximate average slope): %

c. FLOW INFORMATION

Tributary provides for: Seasonal flow

Estimate average number of flow events in review area/year: 20 (or greater)

Describe flow regime: Drainage D14 has seasonal intermittent flow that in the mediterranean climate of the project site can be considered a latively permanent water.

Other information on duration and volume: .

Surface flow is: discrete and confined. Characteristics: .

Subsurface flow: Pick List. **Explain findings:** .

- Dye (or other) test performed: .

Tributary has (check all that apply):

- Bed and banks
- OHWM⁶ (check all indicators that apply):
 - clear, natural line impressed on the bank
 - changes in the character of soil
 - destruction of terrestrial vegetation
 - vegetation matted down, bent, or absent
 - leaf litter disturbed or washed away
 - multiple observed or predicted flow events
 - water staining
 - abrupt change in plant community. **Explain:**
 - other (list):
- the presence of litter and debris
- shelving
- the presence of wrack line
- sediment sorting
- scour
- sediment deposition

- Discontinuous OHWM.⁷ **Explain:**

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (**check all that apply**):

- High Tide Line indicated by: OR Mean High Water Mark indicated by:
 - oil or scum line along shore objects
 - survey to available datum
 - fine shell or debris deposits (foreshore)
 - physical markings

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

⁷Ibid.

- physical markings/characteristics
- tidal gauges
- other (*list*):
- vegetation lines/changes in vegetation types

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). *Explain:* .

Identify specific pollutants, if known:

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

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. *Explain findings:*
 - Fish/spawn areas. *Explain findings:*
 - Other environmentally-sensitive species. *Explain findings:*
 - Aquatic/wildlife diversity. *Explain findings:*

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

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties

Wetland size: acres

Wetland type. *Explain:*

Wetland quality. *Explain:*

Project wetlands cross or serve as state boundaries. *Explain:*

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List** *Explain:*

Surface flow is: **Pick List**

Characteristics:

Subsurface flow: **Pick List** *Explain findings:*

- Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

- Directly abutting
- Not directly abutting
 - Discrete wetland hydrologic connection. *Explain:*
 - Ecological connection. *Explain:*
 - Separated by berm / barrier. *Explain:*

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are: **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List**

Estimate approximate location of wetland as within the: **Pick List** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). *Explain:*

Identify specific pollutants, if known: *Explain:*

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

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. *Explain:*
- Habitat for:
 - Federally Listed species. *Explain findings:*
 - Fish/spawn areas. *Explain findings:*

- Other environmentally-sensitive species. *Explain findings:*
- Aquatic/wildlife diversity. *Explain findings:*

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

- (i) All wetland(s) being considered in the cumulative analysis: [Pick List](#)
- (ii) Approximately () acres in total are being considered in the cumulative analysis.

(iii) For each wetland associated with the reach or waterbody being analyzed in this form, specify the following:

Number/Name ⁸	Directly abuts (Yes/No)	Size	Number/Name	Directly abuts (Yes/No)	Size
	Pick	acres		Pick	acres
	Pick	acres		Pick	acres
	Pick	acres		Pick	acres
	Pick	acres		Pick	acres
	Pick	acres		Pick	acres
	Pick	acres		Pick	acres

- (iv) Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** *Explain* findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** *Explain* findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

⁸ In the Number/Name column, add the number and/or name that you have given the wetland being referred to in the table. Example, you are referring to a wetland on your wetland delineation map number 6, that you call wetland No.3 on a reach you refer to as Putah Creek. For this wetland you would add to the table in the Number/Name column, something like the following: (No. 3, Putah Ck., Map # 6).

3 **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** *Explain* findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

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

- 1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
 - TNWs: linear feet width (ft), and/or acres.
 - Wetlands adjacent to TNWs: acres.

- 2. **RPWs that flow directly or indirectly into TNWs.**
 - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
 - Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: *The unnamed drainages D14 has a well defined bed and bank (evident even with aerial photography) and an ordinary high water mark that within the mediterranean climate of the project site is associated with relatively permanent waters with seasonal flow .*

Provide estimates for jurisdictional waters in the review area (*check all that apply*)

 - Tributary waters: *1204* linear feet *2-4* width (ft).
 - Other non-wetland waters: acres.

Identify type(s) of waters: .

- 3. **Non-RPWs⁹ that flow directly or indirectly into TNWs.**
 - Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (*check all that apply*):

 - Tributary waters: linear feet width (ft).
 - Other non-wetland waters: acres.

Identify type(s) of waters: .

- 4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
 - Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 - Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in **Section III.D.2**, above. Provide rationale indicating that wetland is directly abutting an RPW: .
 - Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in **Section III.B** and rationale in **Section III.D.2**, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

- 5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
 - Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at **Section III.C**.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

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

⁹See Footnote # 3.
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- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at **Section III.C.**

Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters.¹⁰

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from “waters of the U.S.,” or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (*CHECK ALL THAT APPLY*):¹¹

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: .
- Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (*check all that apply*)

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
Identify type(s) of waters: .
- Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in “SWANCC,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).
- Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. **Explain:**
 .
- Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (*check all that apply*):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.
-

¹⁰ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹¹ **Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.**

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: *Office concurs with revised delineation of October 2011 and further revision of January 2012 that maps features in black and white.*
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report. *Office concurs with revised delineation of October 2011 and further revision of January 2012 that maps features in black and white.*
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: *See January 2012 memo to the file regarding May 25, 2011 site visit.*
- Corps navigable waters' study: .
- U.S. Geological Survey Hydrologic Atlas: .
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: .
- USDA Natural Resources Conservation Service Soil Survey. Citation: .
- National wetlands inventory map(s). Cite name: .
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): .
 Other (Name & Date): .
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): .
-

B. ADDITIONAL COMMENTS TO SUPPORT JD:

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

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

SECTION I: BACKGROUND INFORMATION

- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** January 31, 2012
- B. DISTRICT OFFICE:** San Francisco District **FILE NUMBER:** 290935
File Name: Diamond A Ranch
Waterbody Name: Drainage D15, South Fork Apperson Creek
- C. PROJECT LOCATION AND BACKGROUND INFORMATION:**
State: California County/parish/borough: Alameda Co. City:
(lat/long (in degree decimal format): Lat: 37.553504 N Long: -121.8319 W
Pick List (lat/long (in degree decimal format): Lat: Pick Long: Pick
Pick List (lat/long (in degree decimal format): Lat: Pick Long: Pick
Universal Transverse Mercator: UTM Zone 10
Name of nearest waterbody: San Antonio Reservoir
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: San Antonio Reservoir
Name of watershed or Hydrologic Unit Code (HUC): San Francisco Bay, 18050004
 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request
 Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
- D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**
 Office (Desk) Determination. Date:
 Field Determination. Date(s): May 25, 2011

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required].

- Waters subject to the ebb and flow of the tide.
 Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. **Explain:**

B. CWA SECTION 404 DETERMINATION OF JURISDICTION

There are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S:

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
 Wetlands adjacent to TNWs
 Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
 Non-RPWs that flow directly or indirectly into TNWs
 Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
 Impoundments of jurisdictional waters
 Isolated (interstate or intrastate) waters, including isolated wetlands

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

Non-wetland waters: 3329 linear feet: 5-10 width (ft) and/or 0.22 acres. (other comments: abandoned stock ponds SP10 and SP11 constructed at the headwaters of Drainage D15, abandoned stock pond SP12 is situated at the headwaters to an unnamed tributary to D15)

Wetlands: 0.17 acres. (other comments: Combined acreage of wetlands W35 and W36)

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

Elevation of established OHWM (if known):

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

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

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

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

SECTION III: CWA ANALYSIS

A TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW
Identify TNW:
Summarize rationale supporting determination that waterbody is a TNW:
2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is “adjacent”:

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

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

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

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

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

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

- (i) General Area Conditions:
 - Watershed size: [approximately 1.5 square miles](#)
 - Drainage area: [0.57 acres](#)
 - Average annual rainfall: [24 inches](#)
 - Average annual snowfall: [0 inches](#)
- (ii) Physical Characteristics:
 - a. **Relationship with TNW:**
 - Tributary flows directly into TNW
 - Tributary flows through [Pick List](#) tributaries before entering TNW

Project waters are [Pick List](#) river miles from TNW.

Project waters are [Pick List](#) river miles from RPW.

Project waters are [Pick List](#) aerial (straight) miles from TNW.

Project waters are [Pick List](#) aerial (straight) miles from RPW.

Project waters cross or serve as a state boundary. *Explain:*

Identify flow route to TNW⁵: [The South Fork of Apperson Creek is a tributary of San Antonio Reservoir.](#)

Tributary stream order, if known:
 - b. **General Tributary Characteristics (check all that apply)::**

³ Supporting documentation is presented in Section III.F.

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

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

Tributary is:

- Natural: (comment if needed)
- Artificial (man-made): **Explain:**
- Manipulated (man-altered): **Explain:**

Tributary properties with respect to top of bank (*estimate*):

Average width: 4 feet (measured from top of bank to top of bank)
Average depth: feet. (measured from OHWM to top of bank)
Average side slopes: [Pick List](#)

Primary tributary substrate composition (check all that apply):

- Silt:
- Sand:
- Clay:
- Cobbles:
- Gravel:
- Muck:
- Bedrock:
- Concrete:
- Vegetation (Type / % cover):
- Other (Explain):

Tributary condition/stability [e.g., highly eroding, sloughing banks]. **Explain:** .

Presence of run/riffle/pool complexes. **Explain:** .

Tributary geometry: [Pick List](#).

Tributary gradient (approximate average slope): %

c. FLOW INFORMATION

Tributary provides for: [Perennial flow](#)

Estimate average number of flow events in review area/year: 20 (or greater)

Describe flow regime: [The South Fork of Apperson Creek is considered a perennial stream.](#)

Other information on duration and volume: .

Surface flow is: [discrete and confined](#). Characteristics: .

Subsurface flow: [Pick List](#). **Explain findings:** .

- Dye (or other) test performed: .

Tributary has (check all that apply):

- Bed and banks
- OHWM⁶ (check all indicators that apply):
 - clear, natural line impressed on the bank
 - changes in the character of soil
 - destruction of terrestrial vegetation
 - vegetation matted down, bent, or absent
 - leaf litter disturbed or washed away
 - multiple observed or predicted flow events
 - water staining
 - abrupt change in plant community. **Explain:**
 - other (list):
- the presence of litter and debris
- shelving
- the presence of wrack line
- sediment sorting
- scour
- sediment deposition

- Discontinuous OHWM.⁷ **Explain:**

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (**check all that apply**):

- High Tide Line indicated by: **OR** Mean High Water Mark indicated by:
 - oil or scum line along shore objects
 - fine shell or debris deposits (foreshore)
 - physical markings/characteristics
 - survey to available datum
 - physical markings
 - vegetation lines/changes in vegetation types

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

⁷Ibid.

- tidal gauges
- other (*list*):

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). *Explain:* .

Identify specific pollutants, if known:

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

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. *Explain findings:*
 - Fish/spawn areas. *Explain findings:*
 - Other environmentally-sensitive species. *Explain findings:*
 - Aquatic/wildlife diversity. *Explain findings:*

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

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties

Wetland size: acres

Wetland type. *Explain:*

Wetland quality. *Explain:*

Project wetlands cross or serve as state boundaries. *Explain:*

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List** *Explain:*

Surface flow is: **Pick List**

Characteristics:

Subsurface flow: **Pick List** *Explain findings:*

- Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

- Directly abutting

- Not directly abutting

Discrete wetland hydrologic connection. *Explain:* **The wetlands are at the headwaters of the South**

- Fork of Apperson Creek. This area has been heavily impacted altering the original hydrology/topography.**

- Ecological connection. *Explain:*

- Separated by berm / barrier. *Explain:*

(d) Proximity (Relationship) to TNW

Project wetlands are **2 - 5** river miles from TNW.

Project waters are: **1 - 2** aerial (straight) miles from TNW.

Flow is from: **wetland to navigable waters**

Estimate approximate location of wetland as within the: **Pick List** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). *Explain:*

Identify specific pollutants, if known: *Explain:*

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

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. *Explain:*
- Habitat for:
 - Federally Listed species. *Explain findings:*

- Fish/spawn areas. *Explain findings:*
- Other environmentally-sensitive species. *Explain findings:*
- Aquatic/wildlife diversity. *Explain findings:*

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

- (i) All wetland(s) being considered in the cumulative analysis: 2
- (ii) Approximately (0.17) acres in total are being considered in the cumulative analysis.

(iii) For each wetland associated with the reach or waterbody being analyzed in this form, specify the following:

Number/Name ⁸	Directly abuts (Yes/No)	Size	
W35	No	0.11 acres	
W36	No	0.06 acres	
	Pick	acres	
	Pick	acres	
	Pick	acres	
	Pick	acres	
	Pick	acres	
	Pick	acres	

- (iv) Summarize overall biological, chemical and physical functions being performed: *The adjacent wetland W35 and W36 are seasonal wetlands. Seasonal wetlands have numerous functions and services such as to provide short-term water storage that reduces downstream flood peaks and long-term water storage that helps maintain and moderate stream flows. Seasonal wetlands also retain sediments and nutrients therefore limiting downstream sedimentation and nutrient loading. Increased sedimentation and nutrient loading has been shown to decrease the water quality of the aquatic resource, the downstream traditional navigable water, San Antonio Reservoir that is approximately half a mile to the north. San Antonio Reservoir is part of the from the Hetch Hetchy Aqueduct and is the municipal water supply for San Francisco County. No specific studies have been completed on the project site to determine the magnitude at which the above mentioned functions and values are being performed.*

C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

⁸ In the Number/Name column, add the number and/or name that you have given the wetland being referred to in the table. Example, you are referring to a wetland on your wetland delineation map number 6, that you call wetland No.3 on a reach you refer to as Putah Creek. For this wetland you would add to the table in the Number/Name column, something like the following: (No. 3, Putah Ck., Map # 6).

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** *Explain* findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** *Explain* findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** *Explain* findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

The adjacent wetland W35 and W36 are seasonal wetlands. Seasonal wetlands have numerous functions and services such as to provide short-term water storage that reduces downstream flood peaks and long-term water storage that helps maintain and moderate stream flows. Seasonal wetlands also retain sediments and nutrients therefore limiting downstream sedimentation and nutrient loading. Increased sedimentation and nutrient loading has been shown to decrease the water quality of the aquatic resource, the downstream traditional navigable water, San Antonio Reservoir that is approximately half a mile to the north. San Antonio Reservoir is part of the from the Hetch Hetchy Aqueduct and is the municipal water supply for San Francisco County. No specific studies have been completed on the project site to determine the magnitude at which the above mentioned functions and values are being performed.

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
 - TNWs: linear feet width (ft), and/or acres.
 - Wetlands adjacent to TNWs: acres.
2. **RPWs that flow directly or indirectly into TNWs.**
 - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
 - Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: *The South Fork of Apperson Creek is considered a perennial creek and is mapped as a blue line feature in the USGS quad sheet.*
Provide estimates for jurisdictional waters in the review area (*check all that apply*):
 - Tributary waters: 3329 linear feet 5-10 width (ft).
 - Other non-wetland waters: acres.
Identify type(s) of waters: .
3. **Non-RPWs⁹ that flow directly or indirectly into TNWs.**
 - Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
Provide estimates for jurisdictional waters within the review area (*check all that apply*):
 - Tributary waters: linear feet width (ft).
 - Other non-wetland waters: acres.
Identify type(s) of waters: .
4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
 - Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 - Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in **Section III.D.2**, above. Provide rationale indicating that wetland is directly abutting an RPW: .

⁹See Footnote # 3.
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- Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in **Section III.B** and rationale in **Section III.D.2**, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at **Section III.C**.

Provide acreage estimates for jurisdictional wetlands in the review area: **0.17** acres.

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

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at **Section III.C**.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters.¹⁰

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from “waters of the U.S.,” or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹¹

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: .
- Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (**check all that apply**)

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
Identify type(s) of waters: .
- Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in “SWANCC,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).
- Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. **Explain:**

¹⁰ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹¹ **Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.**



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

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

SECTION I: BACKGROUND INFORMATION

- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** January 31, 2012
- B. DISTRICT OFFICE:** San Francisco District **FILE NUMBER:** 290935
File Name: Diamond A Ranch
Waterbody Name: Drainage D16, tributary to South Fork Apperson Creek
- C. PROJECT LOCATION AND BACKGROUND INFORMATION:**
State: California County/parish/borough: Alameda Co. City:
(lat/long (in degree decimal format): Lat: 37.553392 N Long: -121.8305785 W
Pick List (lat/long (in degree decimal format): Lat: Pick Long: Pick
Pick List (lat/long (in degree decimal format): Lat: Pick Long: Pick
Universal Transverse Mercator: UTM Zone 10
Name of nearest waterbody: South Fork to Apperson Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: San Antonio Reservoir
Name of watershed or Hydrologic Unit Code (HUC): San Francisco Bay, 18050004
 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request
 Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
- D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**
 Office (Desk) Determination. Date:
 Field Determination. Date(s): May 25, 2011

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required].
 Waters subject to the ebb and flow of the tide.
 Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. **Explain:**

B. CWA SECTION 404 DETERMINATION OF JURISDICTION

There are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S:

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
- Wetlands adjacent to TNWs
- Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
- Non-RPWs that flow directly or indirectly into TNWs
- Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
- Impoundments of jurisdictional waters
- Isolated (interstate or intrastate) waters, including isolated wetlands

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

Non-wetland waters: 435 linear feet: 2-3 width (ft) and/or acres. (other comments:)

Wetlands: acres. (other comments:)

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

Elevation of established OHWM (if known):

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

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

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

³ Supporting documentation is presented in Section III.F.

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

SECTION III: CWA ANALYSIS

A TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW
Identify TNW:
Summarize rationale supporting determination that waterbody is a TNW:
2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is “adjacent”:

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

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

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

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

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

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

- (i) General Area Conditions:
 - Watershed size: **approximately 1.5 square miles**
 - Drainage area: **0.02 acres**
 - Average annual rainfall: **24 inches**
 - Average annual snowfall: **0 inches**
- (ii) Physical Characteristics:
 - a. **Relationship with TNW:**
 - Tributary flows directly into TNW
 - Tributary flows through **2** tributaries before entering TNW
 - Project waters are **1 (or less)** river miles from TNW.
 - Project waters are **1 (or less)** river miles from RPW.
 - Project waters are **1 (or less)** aerial (straight) miles from TNW.
 - Project waters are **1 (or less)** aerial (straight) miles from RPW.
 - Project waters cross or serve as a state boundary. *Explain:*
 - Identify flow route to TNW⁵: **D16 flows into D15 , the South Fork of Apperson Creek, a tributary of San Antonio Reservoir.**
 - Tributary stream order, if known:
 - b. **General Tributary Characteristics (check all that apply)::**

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

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

Tributary is:

- Natural: (comment if needed)
- Artificial (man-made): **Explain:**
- Manipulated (man-altered): **Explain:**

Tributary properties with respect to top of bank (*estimate*):

Average width: 4 feet (measured from top of bank to top of bank)
Average depth: feet. (measured from OHWM to top of bank)
Average side slopes: [Pick List](#)

Primary tributary substrate composition (check all that apply):

- Silt:
- Sand:
- Clay:
- Cobbles:
- Gravel:
- Muck:
- Bedrock:
- Concrete:
- Vegetation (Type / % cover):
- Other (Explain):

Tributary condition/stability [e.g., highly eroding, sloughing banks]. **Explain:** .

Presence of run/riffle/pool complexes. **Explain:** .

Tributary geometry: [Pick List](#).

Tributary gradient (approximate average slope): %

c. FLOW INFORMATION

Tributary provides for: [Seasonal flow](#)

Estimate average number of flow events in review area/year: 20 (or greater)

Describe flow regime: [The unnamed drainages D16 has a well defined bed and bank \(evident even with aerial photography\) and an ordinary high water mark that within the mediterranean climate of the project site is associated with seasonal rainfall flow.](#)

Other information on duration and volume: .

Surface flow is: [discrete and confined](#). Characteristics: .

Subsurface flow: [Pick List](#). **Explain findings:** .

Dye (or other) test performed: .

Tributary has (check all that apply):

- Bed and banks
- OHWM⁶ (check all indicators that apply):
 - clear, natural line impressed on the bank
 - changes in the character of soil
 - destruction of terrestrial vegetation
 - vegetation matted down, bent, or absent
 - leaf litter disturbed or washed away
 - multiple observed or predicted flow events
 - water staining
 - abrupt change in plant community. **Explain:**
 - other (list):
- Discontinuous OHWM.⁷ **Explain:**

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (**check all that apply**):

- High Tide Line indicated by: **OR** Mean High Water Mark indicated by:
 - oil or scum line along shore objects
 - survey to available datum

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

⁷Ibid.

- fine shell or debris deposits (foreshore)
- physical markings/characteristics
- tidal gauges
- other (*list*):
- physical markings
- vegetation lines/changes in vegetation types

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). *Explain:* .

Identify specific pollutants, if known:

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

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. *Explain findings:*
 - Fish/spawn areas. *Explain findings:*
 - Other environmentally-sensitive species. *Explain findings:*
 - Aquatic/wildlife diversity. *Explain findings:*

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

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties

Wetland size: acres

Wetland type. *Explain:*

Wetland quality. *Explain:*

Project wetlands cross or serve as state boundaries. *Explain:*

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List** Explain:

Surface flow is: **Pick List**

Characteristics:

Subsurface flow: **Pick List** *Explain findings:*

- Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

- Directly abutting
- Not directly abutting
 - Discrete wetland hydrologic connection. *Explain:*
 - Ecological connection. *Explain:*
 - Separated by berm / barrier. *Explain:*

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are: **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List**

Estimate approximate location of wetland as within the: **Pick List** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). *Explain:*

Identify specific pollutants, if known: *Explain:*

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

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. *Explain:*
- Habitat for:
 - Federally Listed species. *Explain findings:*

- Fish/spawn areas. *Explain findings:*
- Other environmentally-sensitive species. *Explain findings:*
- Aquatic/wildlife diversity. *Explain findings:*

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

- (i) All wetland(s) being considered in the cumulative analysis: [Pick List](#)
- (ii) Approximately () acres in total are being considered in the cumulative analysis.

(iii) For each wetland associated with the reach or waterbody being analyzed in this form, specify the following:

Number/Name ⁸	Directly abuts (Yes/No)	Size	
	Pick	acres	
	Pick	acres	
	Pick	acres	
	Pick	acres	
	Pick	acres	
	Pick	acres	

- (iv) Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. *Explain* findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D

⁸ In the Number/Name column, add the number and/or name that you have given the wetland being referred to in the table. Example, you are referring to a wetland on your wetland delineation map number 6, that you call wetland No.3 on a reach you refer to as Putah Creek. For this wetland you would add to the table in the Number/Name column, something like the following: (No. 3, Putah Ck., Map # 6).

Ephemeral streams, such as drainage D16 provide the necessary water source for maintaining adequate water levels of downstream traditional navigable waters. Ephemeral streams also have the ability to carry pollutants and flood waters that may influence water quality of downstream traditional navigable waters. In addition, allochthonous energy inputs are a dominant component of the food base in ephemeral streams that will provide the food source for aquatic organisms (i.e. micro-invertebrates, macro-invertebrates, and fishes) in the downstream traditional navigable waters. The downstream traditional navigable water of San Antonio Reservoir is approximately half a mile to the north. San Antonio Reservoir is part of the from the Hetch Hetchy Aqueduct and is the municipal water supply for San Francisco County. No specific studies have been completed on the project site to determine the magnitude at which the above mentioned functions and values are being performed.

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** *Explain* findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

3 **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** *Explain* findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:

- TNWs: linear feet width (ft), and/or acres.
- Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**

- Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
- Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: l.

Provide estimates for jurisdictional waters in the review area (*check all that apply*):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.

Identify type(s) of waters: .

3. **Non-RPWs⁹ that flow directly or indirectly into TNWs.**

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (*check all that apply*):

- Tributary waters: 435 linear feet 2-3 width (ft).
- Other non-wetland waters: acres.

Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 - Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in **Section III.D.2**, above. Provide rationale indicating that wetland is directly abutting an RPW: .
 - Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in **Section III.B** and rationale in **Section III.D.2**, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

⁹See Footnote # 3.
ud080207 HED

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at **Section III.C.**

Provide acreage estimates for jurisdictional wetlands in the review area: _____ acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at **Section III.C.**

Provide estimates for jurisdictional wetlands in the review area: _____ acres.

7. **Impoundments of jurisdictional waters.**¹⁰
- As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from “waters of the U.S.,” or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

E. **ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):**¹¹

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: _____.
- Other factors. Explain: _____.

Identify water body and summarize rationale supporting determination: _____.

Provide estimates for jurisdictional waters in the review area (*check all that apply*)

- Tributary waters: _____ linear feet _____ width (ft).
- Other non-wetland waters: _____ acres.
- Identify type(s) of waters: _____.
- Wetlands: _____ acres.

F. **NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):**

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
- Prior to the Jan 2001 Supreme Court decision in “SWANCC,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).
- Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. **Explain:** _____.
- Other: (explain, if not covered above): _____.

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (*check all that apply*):

¹⁰ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹¹ **Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.**

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.
-

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: *Office concurs with revised delineation of October 2011 and further revision of January 2012 that maps features in black and white.*
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report. *Office concurs with revised delineation of October 2011 and further revision of January 2012 that maps features in black and white.*
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: *See January 2012 memo to the file regarding May 25, 2011 site visit.*
- Corps navigable waters' study: .
- U.S. Geological Survey Hydrologic Atlas: .
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: .
- USDA Natural Resources Conservation Service Soil Survey. Citation: .
- National wetlands inventory map(s). Cite name: .
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): .
 - Other (Name & Date): .
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): .
-

B. ADDITIONAL COMMENTS TO SUPPORT JD:

-

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): January 31, 2012

B. DISTRICT OFFICE: San Francisco District **FILE NUMBER:** 290935

File Name: Diamond A Ranch

Waterbody Name: Drainage D17, tributary to South Fork Apperson Creek

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: California County/parish/borough: Alameda Co. City:
(lat/long (in degree decimal format): Lat: 37.551379 N Long: -121.827498 W

Pick List (lat/long (in degree decimal format): Lat: Pick Long: Pick

Pick List (lat/long (in degree decimal format): Lat: Pick Long: Pick

Universal Transverse Mercator: UTM Zone 10

Name of nearest waterbody: South Fork Apperson Creek

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: San Antonio Reservoir

Name of watershed or Hydrologic Unit Code (HUC): San Francisco Bay, 18050004

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

Office (Desk) Determination. Date:

Field Determination. Date(s): May 25, 2011

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required].

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. **Explain:**

B. CWA SECTION 404 DETERMINATION OF JURISDICTION

There are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S:

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs

Non-RPWs that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

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

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

Impoundments of jurisdictional waters

Isolated (interstate or intrastate) waters, including isolated wetlands

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

Non-wetland waters: 505 linear feet: 1-3 width (ft) and/or acres. (other comments:)

Wetlands: acres. (other comments:)

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

Elevation of established OHWM (if known):

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

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

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

³ Supporting documentation is presented in Section III.F.

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

SECTION III: CWA ANALYSIS

A TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW
Identify TNW:
Summarize rationale supporting determination that waterbody is a TNW:
2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is “adjacent”:

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

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

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

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

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

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

- (i) General Area Conditions:
 - Watershed size: [approximately 1.5 square miles](#)
 - Drainage area: [0.03 acres](#)
 - Average annual rainfall: [24 inches](#)
 - Average annual snowfall: [0 inches](#)
- (ii) Physical Characteristics:
 - a. **Relationship with TNW:**
 - Tributary flows directly into TNW
 - Tributary flows through [2](#) tributaries before entering TNW
 - Project waters are [1 \(or less\)](#) river miles from TNW.
 - Project waters are [1 \(or less\)](#) river miles from RPW.
 - Project waters are [1 \(or less\)](#) aerial (straight) miles from TNW.
 - Project waters are [1 \(or less\)](#) aerial (straight) miles from RPW.
 - Project waters cross or serve as a state boundary. *Explain:*
 - Identify flow route to TNW⁵: [D17 flows into the South Fork of Apperson Creek, a tributary of San Antonio Reservoir.](#)
 - Tributary stream order, if known:
 - b. **General Tributary Characteristics (check all that apply)::**

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

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

Tributary is:

- Natural: (comment if needed)
- Artificial (man-made): **Explain:**
- Manipulated (man-altered): **Explain:**

Tributary properties with respect to top of bank (*estimate*):

Average width: 4 feet (measured from top of bank to top of bank)
Average depth: feet. (measured from OHWM to top of bank)
Average side slopes: [Pick List](#)

Primary tributary substrate composition (check all that apply):

- Silt:
- Sand:
- Clay:
- Cobbles:
- Gravel:
- Muck:
- Bedrock:
- Concrete:
- Vegetation (Type / % cover):
- Other (Explain):

Tributary condition/stability [e.g., highly eroding, sloughing banks]. **Explain:** .

Presence of run/riffle/pool complexes. **Explain:** .

Tributary geometry: [Pick List](#).

Tributary gradient (approximate average slope): %

c. FLOW INFORMATION

Tributary provides for: [Seasonal flow](#)

Estimate average number of flow events in review area/year: 20 (or greater)

Describe flow regime: [The unnamed drainages D17 has seasonal flow.](#)

Other information on duration and volume: .

Surface flow is: [discrete and confined](#). Characteristics: .

Subsurface flow: [Pick List](#). **Explain findings:** .

- Dye (or other) test performed: .

Tributary has (check all that apply):

- Bed and banks
- OHWM⁶ (check all indicators that apply):
 - clear, natural line impressed on the bank
 - changes in the character of soil
 - destruction of terrestrial vegetation
 - vegetation matted down, bent, or absent
 - leaf litter disturbed or washed away
 - multiple observed or predicted flow events
 - water staining
 - abrupt change in plant community. **Explain:**
 - other (list):
- the presence of litter and debris
- shelving
- the presence of wrack line
- sediment sorting
- scour
- sediment deposition

- Discontinuous OHWM.⁷ **Explain:**

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (**check all that apply**):

- High Tide Line indicated by: **OR** Mean High Water Mark indicated by:
 - oil or scum line along shore objects
 - fine shell or debris deposits (foreshore)
 - physical markings/characteristics
 - survey to available datum
 - physical markings
 - vegetation lines/changes in vegetation types

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

⁷Ibid.

- tidal gauges
- other (*list*):

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). *Explain:* .

Identify specific pollutants, if known:

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

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. *Explain findings:*
 - Fish/spawn areas. *Explain findings:*
 - Other environmentally-sensitive species. *Explain findings:*
 - Aquatic/wildlife diversity. *Explain findings:*

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

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties

Wetland size: acres

Wetland type. *Explain:*

Wetland quality. *Explain:*

Project wetlands cross or serve as state boundaries. *Explain:*

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List** *Explain:*

Surface flow is: **Pick List**

Characteristics:

Subsurface flow: **Pick List** *Explain findings:*

- Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

- Directly abutting
- Not directly abutting
 - Discrete wetland hydrologic connection. *Explain:*
 - Ecological connection. *Explain:*
 - Separated by berm / barrier. *Explain:*

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are: **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List**

Estimate approximate location of wetland as within the: **Pick List** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). *Explain:*

Identify specific pollutants, if known: *Explain:*

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

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. *Explain:*
- Habitat for:
 - Federally Listed species. *Explain findings:*
 - Fish/spawn areas. *Explain findings:*
 - Other environmentally-sensitive species. *Explain findings:*

Aquatic/wildlife diversity. *Explain findings:*

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

- (i) All wetland(s) being considered in the cumulative analysis: [Pick List](#)
- (ii) Approximately () acres in total are being considered in the cumulative analysis.

(iii) For each wetland associated with the reach or waterbody being analyzed in this form, specify the following:

Number/Name ⁸	Directly abuts (Yes/No)	Size
	Pick	acres

- (iv) Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** *Explain* findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** *Explain* findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

⁸ In the Number/Name column, add the number and/or name that you have given the wetland being referred to in the table. Example, you are referring to a wetland on your wetland delineation map number 6, that you call wetland No.3 on a reach you refer to as Putah Creek. For this wetland you would add to the table in the Number/Name column, something like the following: (No. 3, Putah Ck., Map # 6).

3 **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:**

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
- TNWs: linear feet width (ft), and/or acres.
 - Wetlands adjacent to TNWs: acres.
2. **RPWs that flow directly or indirectly into TNWs.**
- Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
 - Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: *Drainage D17 has seasonal intermittent flow that in the mediterranean climate of the project site can be considered a latively permanent water.*
Provide estimates for jurisdictional waters in the review area (*check all that apply*):
 - Tributary waters: *505* linear feet *1-3* width (ft).
 - Other non-wetland waters: acres.
Identify type(s) of waters: .
3. **Non-RPWs⁹ that flow directly or indirectly into TNWs.**
- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
Provide estimates for jurisdictional waters within the review area (*check all that apply*):
 - Tributary waters: linear feet width (ft).
 - Other non-wetland waters: acres.
Identify type(s) of waters: .
4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 - Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in **Section III.D.2**, above. Provide rationale indicating that wetland is directly abutting an RPW: .
 - Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in **Section III.B** and rationale in **Section III.D.2**, above. Provide rationale indicating that wetland is directly abutting an RPW: .
- Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at **Section III.C**.
- Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at **Section III.C**.

⁹See Footnote # 3.
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Provide estimates for jurisdictional wetlands in the review area: _____ acres.

7. Impoundments of jurisdictional waters.¹⁰

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from “waters of the U.S.,” or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (*CHECK ALL THAT APPLY*):¹¹

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: _____.
- Other factors. Explain: _____.

Identify water body and summarize rationale supporting determination: _____.

Provide estimates for jurisdictional waters in the review area (*check all that apply*)

- Tributary waters: _____ linear feet _____ width (ft).
- Other non-wetland waters: _____ acres.
Identify type(s) of waters: _____.
- Wetlands: _____ acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in “SWANCC,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).
- Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. **Explain:** _____.
- Other: (explain, if not covered above): _____.

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (*check all that apply*):

- Non-wetland waters (i.e., rivers, streams): _____ linear feet _____ width (ft).
- Lakes/ponds: _____ acres.
- Other non-wetland waters: _____ acres. List type of aquatic resource: _____.
- Wetlands: _____ acres.
-

¹⁰ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹¹ **Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.**

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: *Office concurs with revised delineation of October 2011 and further revision of January 2012 that maps features in black and white.*
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report. *Office concurs with revised delineation of October 2011 and further revision of January 2012 that maps features in black and white.*
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: *See January 2012 memo to the file regarding May 25, 2011 site visit.*
- Corps navigable waters' study: .
- U.S. Geological Survey Hydrologic Atlas: .
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: .
- USDA Natural Resources Conservation Service Soil Survey. Citation: .
- National wetlands inventory map(s). Cite name: .
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): .
 Other (Name & Date): .
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): .
-

B. ADDITIONAL COMMENTS TO SUPPORT JD:

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

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

SECTION I: BACKGROUND INFORMATION

- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** January 31, 2012
- B. DISTRICT OFFICE:** San Francisco District **FILE NUMBER:** 290935
File Name: Diamond A Ranch
Waterbody Name: Drainage D18, tributary to South Fork Apperson Creek
- C. PROJECT LOCATION AND BACKGROUND INFORMATION:**
State: California County/parish/borough: Alameda Co. City:
(lat/long (in degree decimal format): Lat: 37.552012 N Long: -121.827996 W
Pick List (lat/long (in degree decimal format): Lat: Pick Long: Pick
Pick List (lat/long (in degree decimal format): Lat: Pick Long: Pick
Universal Transverse Mercator: UTM Zone 10
Name of nearest waterbody: South Fork Apperson Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: San Antonio Reservoir
Name of watershed or Hydrologic Unit Code (HUC): San Francisco Bay, 18050004
 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request
 Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
- D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**
 Office (Desk) Determination. Date:
 Field Determination. Date(s): May 25, 2011

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required].
 Waters subject to the ebb and flow of the tide.
 Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. **Explain:**

B. CWA SECTION 404 DETERMINATION OF JURISDICTION

There are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.:

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
- Wetlands adjacent to TNWs
- Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
- Non-RPWs that flow directly or indirectly into TNWs
- Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
- Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
- Impoundments of jurisdictional waters
- Isolated (interstate or intrastate) waters, including isolated wetlands

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

Non-wetland waters: 433 linear feet: 5 width (ft) and/or acres. (other comments:)
Wetlands: acres. (other comments:)

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

Elevation of established OHWM (if known):

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

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

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

³ Supporting documentation is presented in Section III.F.

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

SECTION III: CWA ANALYSIS

A TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW
Identify TNW:
Summarize rationale supporting determination that waterbody is a TNW:
2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is “adjacent”:

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

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

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

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

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

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

- (i) General Area Conditions:
 - Watershed size: [approximately 1.5 square miles](#)
 - Drainage area: [0.05 acres](#)
 - Average annual rainfall: [24 inches](#)
 - Average annual snowfall: [0 inches](#)
- (ii) Physical Characteristics:
 - a. **Relationship with TNW:**
 - Tributary flows directly into TNW
 - Tributary flows through [2](#) tributaries before entering TNW
 - Project waters are [1 \(or less\)](#) river miles from TNW.
 - Project waters are [1 \(or less\)](#) river miles from RPW.
 - Project waters are [1 \(or less\)](#) aerial (straight) miles from TNW.
 - Project waters are [1 \(or less\)](#) aerial (straight) miles from RPW.
 - Project waters cross or serve as a state boundary. *Explain:*
 - Identify flow route to TNW⁵: [D18 flows into D17 that flows into South Fork of Apperson Creek, a tributary of San Antonio Reservoir.](#)
 - Tributary stream order, if known:
 - b. **General Tributary Characteristics (check all that apply)::**

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

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

Tributary is:

- Natural: (comment if needed)
- Artificial (man-made): **Explain:**
- Manipulated (man-altered): **Explain:**

Tributary properties with respect to top of bank (*estimate*):

Average width: 4 feet (measured from top of bank to top of bank)
Average depth: feet. (measured from OHWM to top of bank)
Average side slopes: [Pick List](#)

Primary tributary substrate composition (check all that apply):

- Silt:
- Sand:
- Clay:
- Cobbles:
- Gravel:
- Muck:
- Bedrock:
- Concrete:
- Vegetation (Type / % cover):
- Other (Explain):

Tributary condition/stability [e.g., highly eroding, sloughing banks]. **Explain:** .

Presence of run/riffle/pool complexes. **Explain:** .

Tributary geometry: [Pick List](#).

Tributary gradient (approximate average slope): %

c. FLOW INFORMATION

Tributary provides for: [Seasonal flow](#)

Estimate average number of flow events in review area/year: 20 (or greater)

Describe flow regime: [The unnamed drainages D17 has seasonal flow.](#)

Other information on duration and volume: .

Surface flow is: [discrete and confined](#). Characteristics: .

Subsurface flow: [Pick List](#). **Explain findings:** .

- Dye (or other) test performed: .

Tributary has (check all that apply):

- Bed and banks
- OHWM⁶ (check all indicators that apply):
 - clear, natural line impressed on the bank
 - changes in the character of soil
 - destruction of terrestrial vegetation
 - vegetation matted down, bent, or absent
 - leaf litter disturbed or washed away
 - multiple observed or predicted flow events
 - water staining
 - abrupt change in plant community. **Explain:**
 - other (list):
- the presence of litter and debris
- shelving
- the presence of wrack line
- sediment sorting
- scour
- sediment deposition

- Discontinuous OHWM.⁷ **Explain:**

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (**check all that apply**):

- High Tide Line indicated by: **OR** Mean High Water Mark indicated by:
 - oil or scum line along shore objects
 - fine shell or debris deposits (foreshore)
 - physical markings/characteristics
 - survey to available datum
 - physical markings
 - vegetation lines/changes in vegetation types

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

⁷Ibid.

- tidal gauges
- other (*list*):

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). *Explain:* .

Identify specific pollutants, if known:

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

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. *Explain findings:*
 - Fish/spawn areas. *Explain findings:*
 - Other environmentally-sensitive species. *Explain findings:*
 - Aquatic/wildlife diversity. *Explain findings:*

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

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties

Wetland size: acres

Wetland type. *Explain:*

Wetland quality. *Explain:*

Project wetlands cross or serve as state boundaries. *Explain:*

(b) General Flow Relationship with Non-TNW:

Flow is: [Pick List](#) *Explain:*

Surface flow is: [Pick List](#)

Characteristics:

Subsurface flow: [Pick List](#) *Explain findings:*

- Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

- Directly abutting
- Not directly abutting
 - Discrete wetland hydrologic connection. *Explain:*
 - Ecological connection. *Explain:*
 - Separated by berm / barrier. *Explain:*

(d) Proximity (Relationship) to TNW

Project wetlands are [Pick List](#) river miles from TNW.

Project waters are: [Pick List](#) aerial (straight) miles from TNW.

Flow is from: [Pick List](#)

Estimate approximate location of wetland as within the: [Pick List](#) floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). *Explain:*

Identify specific pollutants, if known: *Explain:*

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

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. *Explain:*
- Habitat for:
 - Federally Listed species. *Explain findings:*
 - Fish/spawn areas. *Explain findings:*
 - Other environmentally-sensitive species. *Explain findings:*

Aquatic/wildlife diversity. *Explain findings:*

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

- (i) All wetland(s) being considered in the cumulative analysis: [Pick List](#)
- (ii) Approximately () acres in total are being considered in the cumulative analysis.

(iii) For each wetland associated with the reach or waterbody being analyzed in this form, specify the following:

Number/Name ⁸	Directly abuts (Yes/No)	Size
	Pick	acres

- (iv) Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** *Explain* findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D
- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** *Explain* findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

⁸ In the Number/Name column, add the number and/or name that you have given the wetland being referred to in the table. Example, you are referring to a wetland on your wetland delineation map number 6, that you call wetland No.3 on a reach you refer to as Putah Creek. For this wetland you would add to the table in the Number/Name column, something like the following: (No. 3, Putah Ck., Map # 6).

3 **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW. Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:**

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
- TNWs: linear feet width (ft), and/or acres.
 - Wetlands adjacent to TNWs: acres.
2. **RPWs that flow directly or indirectly into TNWs.**
- Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
 - Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: **Drainage D18 has seasonal intermittent flow that in the mediterranean climate of the project site can be considered a relatively permanent water.**
Provide estimates for jurisdictional waters in the review area (*check all that apply*):
 - Tributary waters: **433** linear feet **5** width (ft).
 - Other non-wetland waters: acres.
Identify type(s) of waters: .
3. **Non-RPWs⁹ that flow directly or indirectly into TNWs.**
- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
Provide estimates for jurisdictional waters within the review area (*check all that apply*):
 - Tributary waters: linear feet width (ft).
 - Other non-wetland waters: acres.
Identify type(s) of waters: .
4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 - Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in **Section III.D.2**, above. Provide rationale indicating that wetland is directly abutting an RPW: .
 - Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in **Section III.B** and rationale in **Section III.D.2**, above. Provide rationale indicating that wetland is directly abutting an RPW: .
- Provide acreage estimates for jurisdictional wetlands in the review area: acres.
5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at **Section III.C**.
- Provide acreage estimates for jurisdictional wetlands in the review area: acres.
6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at **Section III.C**.

⁹See Footnote # 3.
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Provide estimates for jurisdictional wetlands in the review area: _____ acres.

7. Impoundments of jurisdictional waters.¹⁰

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from “waters of the U.S.,” or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (*CHECK ALL THAT APPLY*):¹¹

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: _____.
- Other factors. Explain: _____.

Identify water body and summarize rationale supporting determination: _____.

Provide estimates for jurisdictional waters in the review area (*check all that apply*)

- Tributary waters: _____ linear feet _____ width (ft).
- Other non-wetland waters: _____ acres.
Identify type(s) of waters: _____.
- Wetlands: _____ acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in “SWANCC,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).
- Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. **Explain:** _____.
- Other: (explain, if not covered above): _____.

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (*check all that apply*):

- Non-wetland waters (i.e., rivers, streams): _____ linear feet _____ width (ft).
- Lakes/ponds: _____ acres.
- Other non-wetland waters: _____ acres. List type of aquatic resource: _____.
- Wetlands: _____ acres.
-

¹⁰ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹¹ **Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.**

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: *Office concurs with revised delineation of October 2011 and further revision of January 2012 that maps features in black and white.*
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report. *Office concurs with revised delineation of October 2011 and further revision of January 2012 that maps features in black and white.*
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: *See January 2012 memo to the file regarding May 25, 2011 site visit.*
- Corps navigable waters' study: .
- U.S. Geological Survey Hydrologic Atlas: .
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: .
- USDA Natural Resources Conservation Service Soil Survey. Citation: .
- National wetlands inventory map(s). Cite name: .
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): .
 Other (Name & Date): .
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): .
-

B. ADDITIONAL COMMENTS TO SUPPORT JD:

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

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

SECTION I: BACKGROUND INFORMATION

- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** January 31, 2012
- B. DISTRICT OFFICE:** San Francisco District **FILE NUMBER:** 290935
File Name: Diamond A Ranch
Waterbody Name: Drainage D19, tributary to South Fork Apperson Creek
- C. PROJECT LOCATION AND BACKGROUND INFORMATION:**
State: California County/parish/borough: Alameda Co. City:
(lat/long (in degree decimal format): Lat: 37.557141 N Long: -121.833327 W
Pick List (lat/long (in degree decimal format): Lat: Pick Long: Pick
Pick List (lat/long (in degree decimal format): Lat: Pick Long: Pick
Universal Transverse Mercator: UTM Zone 10
Name of nearest waterbody: South Fork Apperson Creek
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: San Antonio Reservoir
Name of watershed or Hydrologic Unit Code (HUC): San Francisco Bay, 18050004
 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request
 Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
- D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**
 Office (Desk) Determination. Date:
 Field Determination. Date(s): May 25, 2011

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required].

- Waters subject to the ebb and flow of the tide.
 Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. **Explain:**

B. CWA SECTION 404 DETERMINATION OF JURISDICTION

There are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.:

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
 Wetlands adjacent to TNWs
 Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
 Non-RPWs that flow directly or indirectly into TNWs
 Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
 Impoundments of jurisdictional waters
 Isolated (interstate or intrastate) waters, including isolated wetlands

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

Non-wetland waters: 237 linear feet: 2 width (ft) and/or acres. (other comments:)

Wetlands: acres. (other comments:)

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

Elevation of established OHWM (if known):

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

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

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

³ Supporting documentation is presented in Section III.F.

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

SECTION III: CWA ANALYSIS

A TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW
Identify TNW:
Summarize rationale supporting determination that waterbody is a TNW:
2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is “adjacent”:

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

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

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

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

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

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

- (i) General Area Conditions:
 - Watershed size: [approximately 1.5 square miles](#)
 - Drainage area: [0.01 acres](#)
 - Average annual rainfall: [24 inches](#)
 - Average annual snowfall: [0 inches](#)
- (ii) Physical Characteristics:
 - a. **Relationship with TNW:**
 - Tributary flows directly into TNW
 - Tributary flows through [2](#) tributaries before entering TNW
 - Project waters are [1 \(or less\)](#) river miles from TNW.
 - Project waters are [1 \(or less\)](#) river miles from RPW.
 - Project waters are [1 \(or less\)](#) aerial (straight) miles from TNW.
 - Project waters are [1 \(or less\)](#) aerial (straight) miles from RPW.
 - Project waters cross or serve as a state boundary. *Explain:*
 - Identify flow route to TNW⁵: [D19 flows into the South Fork of Apperson Creek, a tributary of San Antonio Reservoir.](#)
 - Tributary stream order, if known:
 - b. **General Tributary Characteristics (check all that apply)::**

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

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

Tributary is:

- Natural: (comment if needed)
- Artificial (man-made): **Explain:**
- Manipulated (man-altered): **Explain:**

Tributary properties with respect to top of bank (*estimate*):

Average width: 2 feet (measured from top of bank to top of bank)
Average depth: feet. (measured from OHWM to top of bank)
Average side slopes: [Pick List](#)

Primary tributary substrate composition (check all that apply):

- Silt:
- Sand:
- Clay:
- Cobbles:
- Gravel:
- Muck:
- Bedrock:
- Concrete:
- Vegetation (Type / % cover):
- Other (Explain):

Tributary condition/stability [e.g., highly eroding, sloughing banks]. **Explain:** .

Presence of run/riffle/pool complexes. **Explain:** .

Tributary geometry: [Pick List](#).

Tributary gradient (approximate average slope): %

c. FLOW INFORMATION

Tributary provides for: [Seasonal flow](#)

Estimate average number of flow events in review area/year: 20 (or greater)

Describe flow regime: [The unnamed drainages D19 has seasonal flow.](#)

Other information on duration and volume: .

Surface flow is: [discrete and confined](#). Characteristics: .

Subsurface flow: [Pick List](#). **Explain findings:** .

- Dye (or other) test performed: .

Tributary has (check all that apply):

- Bed and banks
- OHWM⁶ (check all indicators that apply):
 - clear, natural line impressed on the bank
 - changes in the character of soil
 - destruction of terrestrial vegetation
 - vegetation matted down, bent, or absent
 - leaf litter disturbed or washed away
 - multiple observed or predicted flow events
 - water staining
 - abrupt change in plant community. **Explain:**
 - other (list):
- the presence of litter and debris
- shelving
- the presence of wrack line
- sediment sorting
- scour
- sediment deposition

- Discontinuous OHWM.⁷ **Explain:**

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (**check all that apply**):

- High Tide Line indicated by: **OR** Mean High Water Mark indicated by:
 - oil or scum line along shore objects
 - fine shell or debris deposits (foreshore)
 - physical markings/characteristics
 - survey to available datum
 - physical markings
 - vegetation lines/changes in vegetation types

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

⁷Ibid.

- tidal gauges
- other (*list*):

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). *Explain:* .

Identify specific pollutants, if known:

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

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. *Explain findings:*
 - Fish/spawn areas. *Explain findings:*
 - Other environmentally-sensitive species. *Explain findings:*
 - Aquatic/wildlife diversity. *Explain findings:*

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

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties

Wetland size: acres

Wetland type. *Explain:*

Wetland quality. *Explain:*

Project wetlands cross or serve as state boundaries. *Explain:*

(b) General Flow Relationship with Non-TNW:

Flow is: [Pick List](#) *Explain:*

Surface flow is: [Pick List](#)

Characteristics:

Subsurface flow: [Pick List](#) *Explain findings:*

- Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

- Directly abutting
- Not directly abutting
 - Discrete wetland hydrologic connection. *Explain:*
 - Ecological connection. *Explain:*
 - Separated by berm / barrier. *Explain:*

(d) Proximity (Relationship) to TNW

Project wetlands are [Pick List](#) river miles from TNW.

Project waters are: [Pick List](#) aerial (straight) miles from TNW.

Flow is from: [Pick List](#)

Estimate approximate location of wetland as within the: [Pick List](#) floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). *Explain:*

Identify specific pollutants, if known: *Explain:*

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

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. *Explain:*
- Habitat for:
 - Federally Listed species. *Explain findings:*
 - Fish/spawn areas. *Explain findings:*
 - Other environmentally-sensitive species. *Explain findings:*

Aquatic/wildlife diversity. *Explain findings:*

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

- (i) All wetland(s) being considered in the cumulative analysis: [Pick List](#)
- (ii) Approximately () acres in total are being considered in the cumulative analysis.

(iii) For each wetland associated with the reach or waterbody being analyzed in this form, specify the following:

Number/Name ⁸	Directly abuts (Yes/No)	Size
	Pick	acres

- (iv) Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs. Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D

⁸ In the Number/Name column, add the number and/or name that you have given the wetland being referred to in the table. Example, you are referring to a wetland on your wetland delineation map number 6, that you call wetland No.3 on a reach you refer to as Putah Creek. For this wetland you would add to the table in the Number/Name column, something like the following: (No. 3, Putah Ck., Map # 6).

Ephemeral streams, such as drainage D19 provide the necessary water source for maintaining adequate water levels of downstream traditional navigable waters. Ephemeral streams also have the ability to carry pollutants and flood waters that may influence water quality of downstream traditional navigable waters. In addition, allochthonous energy inputs are a dominant component of the food base in ephemeral streams that will provide the food source for aquatic organisms (i.e. micro-invertebrates, macro-invertebrates, and fishes) in the downstream traditional navigable waters. The downstream traditional navigable water of San Antonio Reservoir is approximately half a mile to the north. San Antonio Reservoir is part of the from the Hetch Hetchy Aqueduct and is the municipal water supply for San Francisco County. No specific studies have been completed on the project site to determine the magnitude at which the above mentioned functions and values are being performed.

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** *Explain* findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

3 **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** *Explain* findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:

- TNWs: linear feet width (ft), and/or acres.
- Wetlands adjacent to TNWs: acres.

2. **RPWs that flow directly or indirectly into TNWs.**

- Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
- Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (*check all that apply*):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.

Identify type(s) of waters: .

3. **Non-RPWs⁹ that flow directly or indirectly into TNWs.**

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (*check all that apply*):

- Tributary waters: 237 linear feet 2 width (ft).
- Other non-wetland waters: acres.

Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 - Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in **Section III.D.2**, above. Provide rationale indicating that wetland is directly abutting an RPW: .
 - Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in **Section III.B** and rationale in **Section III.D.2**, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

⁹See Footnote # 3.
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5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at **Section III.C.**

Provide acreage estimates for jurisdictional wetlands in the review area: _____ acres.

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at **Section III.C.**

Provide estimates for jurisdictional wetlands in the review area: _____ acres.

7. Impoundments of jurisdictional waters.¹⁰

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from “waters of the U.S.,” or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (*CHECK ALL THAT APPLY*):¹¹

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: _____.
- Other factors. Explain: _____.

Identify water body and summarize rationale supporting determination: _____.

Provide estimates for jurisdictional waters in the review area (*check all that apply*)

- Tributary waters: _____ linear feet _____ width (ft).
- Other non-wetland waters: _____ acres.
- Identify type(s) of waters: _____.
- Wetlands: _____ acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
- Prior to the Jan 2001 Supreme Court decision in “SWANCC,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).
- Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. **Explain:** _____.
- Other: (explain, if not covered above): _____.

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (*check all that apply*):

¹⁰ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹¹ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.
-

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: *Office concurs with revised delineation of October 2011 and further revision of January 2012 that maps features in black and white.*
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report. *Office concurs with revised delineation of October 2011 and further revision of January 2012 that maps features in black and white.*
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: *See January 2012 memo to the file regarding May 25, 2011 site visit.*
- Corps navigable waters' study: .
- U.S. Geological Survey Hydrologic Atlas: .
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: .
- USDA Natural Resources Conservation Service Soil Survey. Citation: .
- National wetlands inventory map(s). Cite name: .
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: .
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): .
 - Other (Name & Date): .
- Previous determination(s). File no. and date of response letter: .
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): .
-

B. ADDITIONAL COMMENTS TO SUPPORT JD:

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

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

SECTION I: BACKGROUND INFORMATION

- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** January 31, 2012
- B. DISTRICT OFFICE:** San Francisco District **FILE NUMBER:** 290935
File Name: Diamond A Ranch
Waterbody Name: Drainage D20, tributary to South Fork Apperson Creek
- C. PROJECT LOCATION AND BACKGROUND INFORMATION:**
State: California County/parish/borough: Alameda Co. City:
(lat/long (in degree decimal format): Lat: 37.557963 N Long: -121.83294 W
Pick List (lat/long (in degree decimal format): Lat: Pick Long: Pick
Pick List (lat/long (in degree decimal format): Lat: Pick Long: Pick
Universal Transverse Mercator: UTM Zone 10
Name of nearest waterbody: San Antonio Reservoir
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: San Antonio Reservoir
Name of watershed or Hydrologic Unit Code (HUC): San Francisco Bay, 18050004
 Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request
 Check if other sites (e.g., offsite mitigation sites, disposal sites, etc) are associated with this action and are recorded on a different JD form.
- D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**
 Office (Desk) Determination. Date:
 Field Determination. Date(s): May 25, 2011

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required].

- Waters subject to the ebb and flow of the tide.
 Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. **Explain:**

B. CWA SECTION 404 DETERMINATION OF JURISDICTION

There are "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.:

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
 Wetlands adjacent to TNWs
 Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
 Non-RPWs that flow directly or indirectly into TNWs
 Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
 Impoundments of jurisdictional waters
 Isolated (interstate or intrastate) waters, including isolated wetlands

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

Non-wetland waters: 165 linear feet: 3 width (ft) and/or acres. (other comments:)

Wetlands: 0.17 acres. (other comments: combined acreage of W13 and W14)

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

Elevation of established OHWM (if known):

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

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

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

³ Supporting documentation is presented in Section III.F.

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

SECTION III: CWA ANALYSIS

A TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW
Identify TNW:
Summarize rationale supporting determination that waterbody is a TNW:
2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is “adjacent”:

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

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

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

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

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

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

- (i) General Area Conditions:
Watershed size: [approximately 1.5 square miles](#)
Drainage area: [0.01 acres](#)
Average annual rainfall: [24 inches](#)
Average annual snowfall: [0 inches](#)
- (ii) Physical Characteristics:
 - a. **Relationship with TNW:**
 Tributary flows directly into TNW
 Tributary flows through [2](#) tributaries before entering TNW

Project waters are [1 \(or less\)](#) river miles from TNW.
Project waters are [1 \(or less\)](#) river miles from RPW.
Project waters are [1 \(or less\)](#) aerial (straight) miles from TNW.
Project waters are [1 \(or less\)](#) aerial (straight) miles from RPW.
Project waters cross or serve as a state boundary. *Explain:*

Identify flow route to TNW⁵: [D20 flows into the South Fork of Apperson Creek, a tributary of San Antonio Reservoir.](#)
Tributary stream order, if known:
 - b. **General Tributary Characteristics (check all that apply)::**

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

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

Tributary is:

- Natural: (comment if needed)
- Artificial (man-made): **Explain:**
- Manipulated (man-altered): **Explain:**

Tributary properties with respect to top of bank (*estimate*):

Average width: 4 feet (measured from top of bank to top of bank)
Average depth: feet. (measured from OHWM to top of bank)
Average side slopes: [Pick List](#)

Primary tributary substrate composition (check all that apply):

- Silt:
- Sand:
- Clay:
- Cobbles:
- Gravel:
- Muck:
- Bedrock:
- Concrete:
- Vegetation (Type / % cover):
- Other (Explain):

Tributary condition/stability [e.g., highly eroding, sloughing banks]. **Explain:** .

Presence of run/riffle/pool complexes. **Explain:** .

Tributary geometry: [Pick List](#).

Tributary gradient (approximate average slope): %

c. FLOW INFORMATION

Tributary provides for: [Seasonal flow](#)

Estimate average number of flow events in review area/year: 20 (or greater)

Describe flow regime: [The unnamed drainages D20 has seasonal flow.](#)

Other information on duration and volume: .

Surface flow is: [discrete and confined](#). Characteristics: .

Subsurface flow: [Pick List](#). **Explain findings:** .

- Dye (or other) test performed: .

Tributary has (check all that apply):

- Bed and banks
- OHWM⁶ (check all indicators that apply):
 - clear, natural line impressed on the bank
 - changes in the character of soil
 - destruction of terrestrial vegetation
 - vegetation matted down, bent, or absent
 - leaf litter disturbed or washed away
 - multiple observed or predicted flow events
 - water staining
 - abrupt change in plant community. **Explain:**
 - other (list):
- the presence of litter and debris
- shelving
- the presence of wrack line
- sediment sorting
- scour
- sediment deposition

- Discontinuous OHWM.⁷ **Explain:**

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (**check all that apply**):

- High Tide Line indicated by: **OR** Mean High Water Mark indicated by:
 - oil or scum line along shore objects
 - fine shell or debris deposits (foreshore)
 - physical markings/characteristics
 - survey to available datum
 - physical markings
 - vegetation lines/changes in vegetation types

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

⁷Ibid.

- tidal gauges
- other (*list*):

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.). *Explain:* .

Identify specific pollutants, if known:

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

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
 - Federally Listed species. *Explain findings:*
 - Fish/spawn areas. *Explain findings:*
 - Other environmentally-sensitive species. *Explain findings:*
 - Aquatic/wildlife diversity. *Explain findings:*

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

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties

Wetland size: 0.08 acres

Wetland type. *Explain:* Seasonal Wetland

Wetland quality. *Explain:*

Project wetlands cross or serve as state boundaries. *Explain:*

(b) General Flow Relationship with Non-TNW:

Flow is: Intermittent Flow *Explain:* Surface flow when fully charged during the rainy season.

Surface flow is: Overland Flow

Characteristics:

Subsurface flow: Yes *Explain findings:*

- Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

- Directly abutting

- Not directly abutting

- Discrete wetland hydrologic connection. *Explain:* Surface water flow from W14 will flow downslope approximately 25 feet towards W13 and then to drainage D20

- Ecological connection. *Explain:*

- Separated by berm / barrier. *Explain:*

(d) Proximity (Relationship) to TNW

Project wetlands are 1 (or less) river miles from TNW.

Project waters are: 1 (or less) aerial (straight) miles from TNW.

Flow is from: wetland to navigable waters

Estimate approximate location of wetland as within the: 2 - 5-year floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). *Explain:*

Identify specific pollutants, if known: *Explain:*

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

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. *Explain:*
- Habitat for:
 - Federally Listed species. *Explain findings:*
 - Fish/spawn areas. *Explain findings:*

- Other environmentally-sensitive species. *Explain findings:*
- Aquatic/wildlife diversity. *Explain findings:*

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

- (i) All wetland(s) being considered in the cumulative analysis: **2**
- (ii) Approximately (**0.17**) acres in total are being considered in the cumulative analysis.

(iii) For each wetland associated with the reach or waterbody being analyzed in this form, specify the following:

Number/Name ⁸	Directly abuts (Yes/No)	Size	Number/Name	Directly abuts (Yes/No)	Size
W13	Yes	0.09 acres		Pick	acres
W14	No	0.08 acres		Pick	acres
	Pick	acres		Pick	acres
	Pick	acres		Pick	acres
	Pick	acres		Pick	acres
	Pick	acres		Pick	acres

- (iv) Summarize overall biological, chemical and physical functions being performed: *The adjacent and abutting wetlands are seasonal wetlands. Seasonal wetlands have numerous functions and services such as to provide short-term water storage that reduces downstream flood peaks and long-term water storage that helps maintain and moderate stream flows. Seasonal wetlands also retain sediments and nutrients therefore limiting downstream sedimentation and nutrient loading. Increased sedimentation and nutrient loading has been shown to decrease the water quality of the aquatic resource, the downstream traditional navigable water, San Antonio Reservoir that is approximately half a mile to the north. San Antonio Reservoir is part of the from the Hetch Hetchy Aqueduct and is the municipal water supply for San Francisco County. No specific studies have been completed on the project site to determine the magnitude at which the above mentioned functions and values are being performed.*

C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

⁸ In the Number/Name column, add the number and/or name that you have given the wetland being referred to in the table. Example, you are referring to a wetland on your wetland delineation map number 6, that you call wetland No.3 on a reach you refer to as Putah Creek. For this wetland you would add to the table in the Number/Name column, something like the following: (No. 3, Putah Ck., Map # 6).

- 1. Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** *Explain* findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D

The adjacent and abutting wetlands are seasonal wetlands. Seasonal wetlands have numerous functions and services such as to provide short-term water storage that reduces downstream flood peaks and long-term water storage that helps maintain and moderate stream flows. Seasonal wetlands also retain sediments and nutrients therefore limiting downstream sedimentation and nutrient loading. Increased sedimentation and nutrient loading has been shown to decrease the water quality of the aquatic resource, the downstream traditional navigable water, San Antonio Reservoir that is approximately half a mile to the north. San Antonio Reservoir is part of the from the Hetch Hetchy Aqueduct and is the municipal water supply for San Francisco County. No specific studies have been completed on the project site to determine the magnitude at which the above mentioned functions and values are being performed.

- 2. Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** *Explain* findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
- 3. Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** *Explain* findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

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

- 1. TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
 - TNWs: linear feet width (ft), and/or acres.
 - Wetlands adjacent to TNWs: acres.
- 2. RPWs that flow directly or indirectly into TNWs.**
 - Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
 - Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: *The unnamed drainage D20 has a well defined bed and bank (evident even with aerial photography) and an ordinary high water mark that within the mediterranean climate of the project site is associated with relatively permanent waters with seasonal flow.*
Provide estimates for jurisdictional waters in the review area (*check all that apply*)
 - Tributary waters: linear feet width (ft).
 - Other non-wetland waters: acres.
Identify type(s) of waters: .
- 3. Non-RPWs⁹ that flow directly or indirectly into TNWs.**
 - Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
Provide estimates for jurisdictional waters within the review area (*check all that apply*):
 - Tributary waters: 505 linear feet 1-3 width (ft).
 - Other non-wetland waters: acres.
Identify type(s) of waters: .
- 4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
 - Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 - Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in **Section III.D.2**, above. Provide rationale indicating that wetland is directly abutting an RPW: .

⁹See Footnote # 3.
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- Wetlands directly abutting an RPW where tributaries typically flow “seasonally.” Provide data indicating that tributary is seasonal in **Section III.B** and rationale in **Section III.D.2**, above. Provide rationale indicating that wetland is directly abutting an RPW: *Wetland W13 is situated directly at the headwaters of D20. No uplands occur between W13 and D20.*

Provide acreage estimates for jurisdictional wetlands in the review area: _____ acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at **Section III.C**.

Provide acreage estimates for jurisdictional wetlands in the review area: _____ acres.

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

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at **Section III.C**.

Provide estimates for jurisdictional wetlands in the review area: _____ acres.

7. Impoundments of jurisdictional waters.¹⁰

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from “waters of the U.S.,” or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹¹

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: _____.
- Other factors. Explain: _____.

Identify water body and summarize rationale supporting determination: _____.

Provide estimates for jurisdictional waters in the review area (*check all that apply*)

- Tributary waters: _____ linear feet _____ width (ft).
- Other non-wetland waters: _____ acres.

Identify type(s) of waters: _____.

- Wetlands: _____ acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in “SWANCC,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).

¹⁰ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹¹ **Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.**

- Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. *Explain:*
- Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (*check all that apply*):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: acres.
-

SECTION IV: DATA SOURCES.

- A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: *Office concurs with revised delineation of October 2011 and further revision of January 2012 that maps features in black and white.*
 - Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report. *Office concurs with revised delineation of October 2011 and further revision of January 2012 that maps features in black and white.*
 - Office does not concur with data sheets/delineation report.
 - Data sheets prepared by the Corps: *See January 2012 memo to the file regarding May 25, 2011 site visit.*
 - Corps navigable waters’ study: .
 - U.S. Geological Survey Hydrologic Atlas: .
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
 - U.S. Geological Survey map(s). Cite scale & quad name: .
 - USDA Natural Resources Conservation Service Soil Survey. Citation: .
 - National wetlands inventory map(s). Cite name: .
 - State/Local wetland inventory map(s): .
 - FEMA/FIRM maps: .
 - 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
 - Photographs: Aerial (Name & Date): .
 - Other (Name & Date): .
 - Previous determination(s). File no. and date of response letter: .
 - Applicable/supporting case law: .
 - Applicable/supporting scientific literature: .
 - Other information (please specify): .
 -

B. ADDITIONAL COMMENTS TO SUPPORT JD:

