

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 D21, 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: 37.55867 N Long: -121.831277 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):<sup>1</sup>

- TNWs, including territorial seas  
 Wetlands adjacent to TNWs  
 Relatively permanent waters<sup>2</sup> (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: 1818 linear feet: 1-5 width (ft) and/or acres. (other comments: combined length of Drainages D21, D21a, D21b, and D21c )

Wetlands: 1.66 acres. (other comments: combined acreage of W15, W22, W23, W24, W25, and W26 )

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

Elevation of established OHWM (if known):

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

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

<sup>2</sup> 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).

<sup>3</sup> 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 waterbody<sup>4</sup> 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: [0.117 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 TNW<sup>5</sup>: [D21 flows into D23, a tributary to 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)::**

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

<sup>5</sup> 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 D21 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
- OHWM<sup>6</sup> (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.<sup>7</sup> **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

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

<sup>7</sup>Ibid.

- 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: 0.03 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 W22 and W23 will flow downslope approximately 25 feet towards W24 and then to drainage D21.

- 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: **6**
- (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 <sup>8</sup>	Directly abuts (Yes/No)	Size	Number/Name	Directly abuts (Yes/No)	Size
W22	No	0.01 acres		Pick	acres
W23	No	0.02 acres		Pick	acres
W24	Yes	0.43 acres		Pick	acres
W25	Yes	0.08 acres		Pick	acres
W26	Yes	0.32 acres		Pick	acres
W15	Yes	0.80 acres		Pick	acres

- (iv) Summarize overall biological, chemical and physical functions being performed: *The adjacent and abuttings 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:

<sup>8</sup> 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 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 drainage D21 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: 1818 linear feet 1-4 width (ft).
    - Other non-wetland waters: acres.  
Identify type(s) of waters: .
3. **Non-RPWs<sup>9</sup> 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: .

<sup>9</sup>See Footnote # 3.  
ud080207 HED

- 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: *W24, W25, and W26 are wetland features that occur at the headwater reaches of D21. Wetland W15 occurs at the downstream reach of D21.*

Provide acreage estimates for jurisdictional wetlands in the review area: **1.63** 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.<sup>10</sup>**

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):<sup>11</sup>**

- 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).

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

<sup>11</sup> **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:



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 D22
- C. PROJECT LOCATION AND BACKGROUND INFORMATION:**  
State: California County/parish/borough: Alameda Co. City:  
(lat/long (in degree decimal format): Lat: 37.55811 N Long: -121.83109 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 of 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):<sup>1</sup>

- TNWs, including territorial seas
- Wetlands adjacent to TNWs
- Relatively permanent waters<sup>2</sup> (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: 341 linear feet: 2.5 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):<sup>3</sup>

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

<sup>2</sup> 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).

<sup>3</sup> 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 waterbody<sup>4</sup> 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 **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 TNW<sup>5</sup>: **D22 flows into D21 that flows into D23, a tributary to 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)::**

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

<sup>5</sup> 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 D22 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
- OHWM<sup>6</sup> (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.<sup>7</sup> **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

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

<sup>7</sup>Ibid.

- 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: **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:*
  - 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 <sup>8</sup>	Directly abuts (Yes/No)	Size
	<a href="#">Pick</a>	<a href="#">acres</a>

- (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:

<sup>8</sup> 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 drainage D21 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: 341 linear feet 2.5 width (ft).
    - Other non-wetland waters: acres.  
Identify type(s) of waters: .
3. **Non-RPWs<sup>9</sup> 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: .
    - 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.**

<sup>9</sup>See Footnote # 3.  
ud080207 HED

- 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.<sup>10</sup>

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*):<sup>11</sup>

- 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.
- 

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

<sup>11</sup> **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 Geodectic 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 D23, 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: 37.559282 N Long: -121.832876 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):<sup>1</sup>

- TNWs, including territorial seas  
 Wetlands adjacent to TNWs  
 Relatively permanent waters<sup>2</sup> (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: 1242 linear feet: 2-4 width (ft) and/or acres. (other comments: )  
Wetlands: 0.14 acres. (other comments: combined acreage of W15, W16, W17, W19 )

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

Elevation of established OHWM (if known):

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

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

<sup>2</sup> 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).

<sup>3</sup> 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 waterbody<sup>4</sup> 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 [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 TNW<sup>5</sup>: [D23 is a tributary to 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)::**

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

<sup>5</sup> 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: **3** 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 D23 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
- OHWM<sup>6</sup> (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.<sup>7</sup> **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

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

<sup>7</sup>Ibid.

- 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: 0.05 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:*

- Ecological connection. *Explain:*

Separated by berm / barrier. *Explain:* Wetland W17 is an abandoned stock pond that has developed wetland vegetation. It had been created along drainage D23 and there is a direct surface flow upstream of D23 into this feature.

- wetland vegetation. It had been created along drainage D23 and there is a direct surface flow upstream of D23 into this feature.

(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: **4**
- (ii) Approximately ( **0.6** ) 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 <sup>8</sup>	Directly abuts (Yes/No)	Size	
W15	Yes	0.80 acres	
W16	Yes	0.12 acres	
W17	Yes	0.16 acres	
W19	Yes	0.14 acres	
	Pick	acres	
	Pick	acres	

  

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

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

<sup>8</sup> 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:

**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 D23 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: *1242* linear feet *2-4* width (ft).
    - Other non-wetland waters: acres.  
Identify type(s) of waters: .
3. **Non-RPWs<sup>9</sup> 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: .
    - 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: *Wetlands W15, W16, W17, and W19 are situated along the tributary D23 and therefore can be considered abutting since no upland area occurs between the wetland and tributary. Wetland W17 is an abandoned stock pond that is now a fully vegetated wetland. The only upland area separating W17 and D23 is the berm used to create W17.*

<sup>9</sup>See Footnote # 3.  
ud080207 HED

Provide acreage estimates for jurisdictional wetlands in the review area: 0.6 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.**<sup>10</sup>

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):**<sup>11</sup>

- 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):        .

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

<sup>11</sup> **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 D24, 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: 37.558914 N Long: -121.829938 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):<sup>1</sup>

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters<sup>2</sup> (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: 728 linear feet: 2-3 width (ft) and/or acres. (other comments: )

Wetlands: 0.22 acres. (other comments: combined wetland area for W18 and W41 that are abandoned stock ponds that have developed wetland vegetation )

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

Elevation of established OHWM (if known):

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

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

<sup>2</sup> 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).

<sup>3</sup> 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 waterbody<sup>4</sup> 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: **0.04 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 TNW<sup>5</sup>: **D24 flows downslope into drainage D23, a tributary to 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)::**

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

<sup>5</sup> 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: 2-3 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 D24 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
- OHWM<sup>6</sup> (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.<sup>7</sup> **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

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

<sup>7</sup>Ibid.

- 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: 0.22 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: Pick List *Explain:*

Surface flow is: Pick List

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:*

- Ecological connection. *Explain:*

- Separated by berm / barrier. *Explain:* The wetlands W18 and W41 are abandoned stock ponds that have become fully vegetated. These abandoned stock ponds are at the headwaters of drainage D24.

(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 ( **0.22** ) 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 <sup>8</sup>	Directly abuts (Yes/No)	Size	Number/Name	Directly abuts (Yes/No)	Size
W18	No	0.14 acres		Pick	acres
W41	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 seasonal wetlands W18 and W41 are abandoned stock ponds constructed at the headwaters of Drainage D24 that have developed into 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:

<sup>8</sup> 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:

**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 D24 has a well defined bed and bank 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: 490 linear feet 3 width (ft).
    - Other non-wetland waters: acres.  
Identify type(s) of waters: .
3. **Non-RPWs<sup>9</sup> 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: .
    - 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.**

<sup>9</sup>See Footnote # 3.  
ud080207 HED

- 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: 0.22 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.<sup>10</sup>

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*):<sup>11</sup>

- 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).

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

<sup>11</sup> **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 D25, 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: 37.557298 N Long: -121.82906 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):<sup>1</sup>

- TNWs, including territorial seas
- Wetlands adjacent to TNWs
- Relatively permanent waters<sup>2</sup> (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: 162 linear feet: 1-2 width (ft) and/or acres. (other comments: )  
Wetlands: 0.002 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):<sup>3</sup>

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

<sup>2</sup> 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).

<sup>3</sup> 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 waterbody<sup>4</sup> 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 **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 TNW<sup>5</sup>: **D25 flows into wetland, W19 associated with drainage D23, a tributary to 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)::**

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

<sup>5</sup> 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: **3** 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 D25 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
- OHWM<sup>6</sup> (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.<sup>7</sup> **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

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

<sup>7</sup>Ibid.

- 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: 0.05 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:*
  - 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: **1**
- (ii) Approximately ( **0.02** ) 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 <sup>8</sup>	Directly abuts (Yes/No)	Size	Number/Name	Directly abuts (Yes/No)	Size
W21	Yes	0.02 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: *The abutting wetland, W21 is a seasonal wetland. 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:

<sup>8</sup> 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:

**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 D21 has a well defined bed and bank 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: 162 linear feet width (ft).
    - Other non-wetland waters: acres.
 Identify type(s) of waters: .
3. **Non-RPWs<sup>9</sup> 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: *Wetland W21 is along the headwaters of tributary D25 and therefore can be considered abutting since no upland area occurs between the wetland and tributary.*
 Provide acreage estimates for jurisdictional wetlands in the review area: 0.002 acres.
5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**

<sup>9</sup>See Footnote # 3.  
ud080207 HED

- 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: 0.05 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.<sup>10</sup>

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*):<sup>11</sup>

- 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).

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

<sup>11</sup> 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 D26, 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: 37.557551 N Long: -121.828183 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):<sup>1</sup>

- TNWs, including territorial seas
- Wetlands adjacent to TNWs
- Relatively permanent waters<sup>2</sup> (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: 208 linear feet: 1 width (ft) and/or acres. (other comments: )  
Wetlands: 0.07 acres. (other comments: Wetland W20 )

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

Elevation of established OHWM (if known):

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

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

<sup>2</sup> 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).

<sup>3</sup> 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 waterbody<sup>4</sup> 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: **0.005 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 TNW<sup>5</sup>: **D26 flows into wetland, W19 associated with drainage D23, a tributary to 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)::**

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

<sup>5</sup> 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 drainages D26 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
- OHWM<sup>6</sup> (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.<sup>7</sup> **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

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

<sup>7</sup>Ibid.

- 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: 0.05 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:*
  - 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: **1**
- (ii) Approximately ( **0.02** ) 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 <sup>8</sup>	Directly abuts (Yes/No)	Size	Number/Name	Directly abuts (Yes/No)	Size
W20	Yes	0.07 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: *The abutting wetland, W20 is a seasonal wetland. 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:

<sup>8</sup> 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:

**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 D26 has a well defined bed and bank 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: *208* linear feet width (ft).
    - Other non-wetland waters: acres.
    - Identify type(s) of waters: .
3. **Non-RPWs<sup>9</sup> 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: *Wetland W20 is along the headwaters of tributary D26 and therefore can be considered abutting since no upland area occurs between the wetland and tributary.*
- Provide acreage estimates for jurisdictional wetlands in the review area: *0.07* acres.
5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**

<sup>9</sup>See Footnote # 3.  
ud080207 HED

- 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: 0.05 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.<sup>10</sup>

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*):<sup>11</sup>

- 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).

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

<sup>11</sup> 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 D27, 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: 37.55597 N Long: -121.825432 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):<sup>1</sup>

- TNWs, including territorial seas  
 Wetlands adjacent to TNWs  
 Relatively permanent waters<sup>2</sup> (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: 490 linear feet: 3 width (ft) and/or acres. (other comments: )  
Wetlands: 0.14 acres. (other comments: combined acreage of W27, W28, W38 and W39 )

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

Elevation of established OHWM (if known):

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

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

<sup>2</sup> 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).

<sup>3</sup> 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 waterbody<sup>4</sup> 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 **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 TNW<sup>5</sup>: **D27 flows into wetland associated with D21, then into D21 that flows into D23, a tributary to 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)::**

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

<sup>5</sup> 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: **3** 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 D27 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
- OHWM<sup>6</sup> (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.<sup>7</sup> **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

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

<sup>7</sup>Ibid.

- 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: 0.05 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 W38 and W39 will flow downslope to wetland W28 and W27 and then to drainage D21. Drainage D21, flows into the South Fork Apperson Creek, a tributary to the San Antonio Reservoir.

- 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: **4**
- (ii) Approximately ( **0.14** ) 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 <sup>8</sup>	Directly abuts (Yes/No)	Size	
W28	Yes	0.06 acres	
W29	Yes	0.03 acres	
W38	No	0.03 acres	
W39	No	0.02 acres	
	Pick	acres	
	Pick	acres	

  

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

- (iv) Summarize overall biological, chemical and physical functions being performed: *The adjacent and abuttings 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:

<sup>8</sup> 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 W38 and W39 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 drainage D21 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: 490 linear feet 3 width (ft).
    - Other non-wetland waters: acres.
 Identify type(s) of waters: .
3. **Non-RPWs<sup>9</sup> 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: .

<sup>9</sup>See Footnote # 3.  
ud080207 HED

- 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: *W28 and W29 are wetland features that occur at the headwater reaches of D27.*

Provide acreage estimates for jurisdictional wetlands in the review area: 0.09 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: 0.05 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.**<sup>10</sup>

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):**<sup>11</sup>

- 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).

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

<sup>11</sup> **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:



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 D28, tributary to Apperson Creek
- C. PROJECT LOCATION AND BACKGROUND INFORMATION:**  
State: California County/parish/borough: Alameda Co. City:  
(lat/long (in degree decimal format): Lat: 37.55188 N Long: -121.809685 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):<sup>1</sup>

- TNWs, including territorial seas  
 Wetlands adjacent to TNWs  
 Relatively permanent waters<sup>2</sup> (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: 750 linear feet: 2 width (ft) and/or acres. (other comments: )

Wetlands: 0.08 acres. (other comments: combined acreage of W29 and W30 )

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

Elevation of established OHWM (if known):

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

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

<sup>2</sup> 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).

<sup>3</sup> 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 waterbody<sup>4</sup> 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 TNW<sup>5</sup>: **D28 is a tributary of Apperson Creek, a tributary of San Antonio Reservoir.**
    - Tributary stream order, if known:
  - b. **General Tributary Characteristics (check all that apply)::**  
Tributary is:

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

<sup>5</sup> 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.

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

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

Average width: **3** 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 D28 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
- OHWM<sup>6</sup> (check all indicators that apply):
 

<input checked="" type="checkbox"/> clear, natural line impressed on the bank	<input type="checkbox"/> the presence of litter and debris
<input type="checkbox"/> changes in the character of soil	<input type="checkbox"/> shelving
<input type="checkbox"/> destruction of terrestrial vegetation	<input type="checkbox"/> the presence of wrack line
<input type="checkbox"/> vegetation matted down, bent, or absent	<input type="checkbox"/> sediment sorting
<input type="checkbox"/> leaf litter disturbed or washed away	<input type="checkbox"/> scour
<input type="checkbox"/> multiple observed or predicted flow events	<input type="checkbox"/> sediment deposition
<input type="checkbox"/> water staining	
<input type="checkbox"/> abrupt change in plant community. <b>Explain:</b>	
<input type="checkbox"/> other (list):	

- Discontinuous OHWM.<sup>7</sup> **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:
 

<input type="checkbox"/> oil or scum line along shore objects	<input type="checkbox"/> survey to available datum
<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	

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

<sup>7</sup>Ibid.

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: [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:*

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 ( **0.08** ) 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 <sup>8</sup>	Directly abuts (Yes/No)	Size	Number/Name	Directly abuts (Yes/No)	Size
W29	Yes	0.03 acres		Pick	acres
W30	Yes	0.05 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 abuttings 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:

<sup>8</sup> 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:

**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 D28 has a well defined bed and bank 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: *750* linear feet<sup>2</sup>width (ft).
    - Other non-wetland waters: acres.  
Identify type(s) of waters: .
3. **Non-RPWs<sup>9</sup> 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: .
    - 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: *Wetlands W29 is situated directly at the headwaters of drainage D28 while wetland W30 is situated within the drairage D28.*
- Provide acreage estimates for jurisdictional wetlands in the review area: *0.6* acres.
5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**

<sup>9</sup>See Footnote # 3.  
ud080207 HED

- 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.<sup>10</sup>**

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*):<sup>11</sup>**

- 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).

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

<sup>11</sup> **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 D29
- C. PROJECT LOCATION AND BACKGROUND INFORMATION:**  
State: California County/parish/borough: Alameda Co. City:  
(lat/long (in degree decimal format): Lat: 37.548453 N Long: -121.805431 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: 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):<sup>1</sup>

- TNWs, including territorial seas  
 Wetlands adjacent to TNWs  
 Relatively permanent waters<sup>2</sup> (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: 239 linear feet: 3 width (ft) and/or 0.14 acres. (other comments: Abandoned stock ponds, SP6 and SP7 are impoundments of other waters since they have been constructed at the headwaters of D29. Drainage D29 is a tributary to Draiange D30, Apperson Apperson Creek )  
Wetlands: 0.05 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):<sup>3</sup>

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

<sup>2</sup> 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 waterbody<sup>4</sup> 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 1.3 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 [Pick List](#) tributaries before entering TNW
- Project waters are [2-5](#) river miles from TNW.  
Project waters are [1 \(or less\)](#) river miles from RPW.  
Project waters are [1-2](#) 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 TNW<sup>5</sup>: [Surface water from abandoned stock ponds SP6 and SP7 and wetland area W33 will flow downslope into drainage D29 that flows into Apperson Creek, D30 that flows directly into the San Antonio Reservoir.](#)
- Tributary stream order, if known:

<sup>3</sup> Supporting documentation is presented in Section III.F.

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

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

b. General Tributary Characteristics (check all that apply):

Tributary is:

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

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

Average width: **3** 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: [Surface water from the abandoned stock ponds, SP6 and SP7 will flow downslope during the rainy season to wetland 33 and then to drainage D29. Drainage D29 will have seasonal flow during the rainy season.](#)

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
- OHWM<sup>6</sup> (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.<sup>7</sup> **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:

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

<sup>7</sup>Ibid.

- |  |   |
|--|---|
| <input type="checkbox"/> oil or scum line along shore objects      | <input type="checkbox"/> survey to available datum                    |
| <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: **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:*
  - 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: **1**
- (ii) Approximately ( **0.05** ) 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 <sup>8</sup>	Directly abuts (Yes/No)	Size		Number/Name	Directly abuts (Yes/No)	Size
W33	Yes	0.05 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: *The abutting seasonal wetland, W33 is a seasonal wetland at the headwaters of drainage D29, a tributary to Apperson Creek, D30. 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?

<sup>8</sup> 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).

**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:
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-RPWs<sup>9</sup> 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: 239 linear feet 3 width (ft).
  - Other non-wetland waters: 1.14 acres.  
Identify type(s) of waters: Abandoned stock ponds SP6 and Sp7 have been constructed at the headwaters of drainage D29.
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: Wetland W33 are situated at the headwaters of drainage D29. There is no upland area between W33 and D29.

Provide acreage estimates for jurisdictional wetlands in the review area: 0.05 acres.

<sup>9</sup>See 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: **0.05** acres.

7. Impoundments of jurisdictional waters.<sup>10</sup>
- 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*):<sup>11</sup>

- 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): \_\_\_\_\_.

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

<sup>11</sup> 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.

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:** Drainage D30, Apperson Creek
- C. PROJECT LOCATION AND BACKGROUND INFORMATION:**  
State: California County/parish/borough: Alameda Co. City:  
(lat/long (in degree decimal format): Lat: 37.54722 N Long: -121.804116 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: 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):<sup>1</sup>

- TNWs, including territorial seas  
 Wetlands adjacent to TNWs  
 Relatively permanent waters<sup>2</sup> (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: 941 linear feet: 3 width (ft) and/or 0.21 acres. (other comments: Stock ponds SP8 (0.08 acre) was constructed at with surface flow of the wetland seep, W34, that directly drains into Drainage D30, Apperson Creek. Stock pond SP9 (0.13 acre) was constructed further upslope at the headwaters of D30. )  
Wetlands: 0.01 acres. (other comments: wetland seep, W34 )

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

Elevation of established OHWM (if known):

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

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

<sup>2</sup> 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 waterbody<sup>4</sup> 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 1.3 square miles](#)
  - Drainage area: [0.06 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 [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 TNW<sup>5</sup>: [Apperson Creek, D30, flows directly into the San Antonio Reservoir.](#)
    - Tributary stream order, if known:
  - b. **General Tributary Characteristics (check all that apply)::**

<sup>3</sup> Supporting documentation is presented in Section III.F.

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

<sup>5</sup> 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: **3** 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: **Apperson Creek is a blue line creek on the USGS quad sheet that has intermittent flow and can therefore be considered a relatively permanent water in the mediterranean climate of northern California where it will have flow during the rainy season.**

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
- OHWM<sup>6</sup> (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.<sup>7</sup> **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

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

<sup>7</sup>Ibid.

- 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: **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:*
  - 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: **1**
- (ii) Approximately ( **0.01** ) 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 <sup>8</sup>	Directly abuts (Yes/No)	Size	
W34	Yes	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 abutting wetland W34 is a seasonal wetland. 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:

<sup>8</sup> 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:

**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: *Apperson Creek is a blue line creek on the USGS quad sheet that has intermittent flow and can therefore be considered a relatively permanent water in the mediterranean climate of northern California where it will have flow during the rainy season.*
- Provide estimates for jurisdictional waters in the review area (*check all that apply*)
- Tributary waters: *941* linear feet *3* width (ft).
  - Other non-wetland waters: acres.
- Identify type(s) of waters: .
3. **Non-RPWs<sup>9</sup> 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: *the wetland seep, W34, that directly drains into Drainage D30, Apperson Creek.* .

Provide acreage estimates for jurisdictional wetlands in the review area: *0.01* acres.

<sup>9</sup>See 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.**<sup>10</sup>

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):**<sup>11</sup>

- 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*):

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

<sup>11</sup> **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:

-