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): February 5, 2014
- B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sacramento District, Sunbrook Golf Course Erosion Protection, SPK-2014-00048-SG

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Utah

County/parish/borough: Washington Citv: Center coordinates of site (lat/long in degree decimal format): Lat. 37.1101412272812°, Long. -113.63074314344°

Universal Transverse Mercator: 12 266242.34 4110329.99 Name of nearest waterbody: Santa Clara

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Virgin River (NIF) Name of watershed or Hydrologic Unit Code (HUC): Upper Virgin. Utah., 15010008

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: February 5, 2014 Field Determination. Date(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

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

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

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

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

1. Waters of the U.S.

- a. Indicate presence of waters of U.S. in review area (check all that apply): ¹
 - TNWs, including territorial seas
 - Wetlands adjacent to TNWs
 - $\overline{\boxtimes}$ Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
 - Non-RPWs that flow directly or indirectly into TNWs
 - Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
 - Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
 - Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
 - Impoundments of jurisdictional waters
 - Isolated (interstate or intrastate) waters, including isolated wetlands
- b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: **4166** linear feet, wide, and/or 5.0 acres. Wetlands: 0 acres.
- c. Limits (boundaries) of jurisdiction based on: Established by OHWM. Elevation of established OHWM (if known):
- 2. Non-regulated waters/wetlands (check if applicable):³
 - Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain:

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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

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

Supporting documentation is presented in Section III.F.

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

1. TNW

Identify TNW:

Summarize rationale supporting determination:

2. Wetland adjacent to TNW

Summarize rationale supporting conclusion that wetland is "adjacent":

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

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

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

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

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

- 1. Characteristics of non-TNWs that flow directly or indirectly into TNW
 - (i) General Area Conditions: Watershed size: 500 square miles Drainage area: 500 square miles Average annual rainfall: 8.32 inches Average annual snowfall: 0 inches
 - (ii) Physical Characteristics:
 - (a) <u>Relationship with TNW:</u>

 □ Tributary flows directly into TNW.
 □ Tributary flows through 1 tributaries before entering TNW.

Project waters are 30 (or more) river miles from TNW.
Project waters are 70 (or less) river miles from RPW.
Project waters are 70 (or less) aerial (straight) miles from TNW.
Project waters are 71 (or less) aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: The Santa Clara River does not cross a state boundary or serve as a state boundary

Identify flow route to TNW⁵: **The Santa Clara is a tributary to the Virgin River, which is an interstate perennial tributary of the Colorado River** Tributary stream order, if known: **3rd**

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

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

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

	Tributary is:
	Tributary properties with respect to top of bank (estimate): Average width: 20 feet Average depth: 2 feet Average side slopes: 2:1.
	Primary tributary substrate composition (check all that apply): Silts Sands Concrete Cobbles Gravel Muck Bedrock Vegetation. Type/% cover: Other. Explain:
	Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: Presence of run/riffle/pool complexes. Explain: There are no run/riffle/pool habitat within the project area Tributary geometry: Relatively straight Tributary gradient (approximate average slope): 1 %
(c)	Flow: Tributary provides for: Perennial Estimate average number of flow events in review area/year: 2-5 Describe flow regime: Flow in the Santa Clara River is regulated by two upstream reservoirs, Gunlock and Baker. However, the capacity of these two reservoirs does not completely eliminate floods and when the reservoirs are full, there is the potential for floods and high water events downstream. Other information on duration and volume:
	Surface flow is: Confined. Characteristics:
	Subsurface flow: Unknown . Explain findings: Dye (or other) test performed:
	Tributary has (check all that apply):
	If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that
	 High Tide Line indicated by: di or scum line along shore objects survey to available datum; fine shell or debris deposits (foreshore) physical markings/characteristics vegetation lines/changes in vegetation types. other (list):
	emical Characteristics: aracterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed

characteristics, etc.). Explain: The Santa Clara River has slightly elevated amounts of naturally occurring

apply):

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break. ⁷Ibid.

elements such as cadmium, arsenic, and aluminum. There is also a concern about elevated concentrations of soluble salts, especially near the confluence with the Virgin River. Identify specific pollutants, if known: Cadmium, arsenic, and aluminum.

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

Riparian corridor. Characteristics (type, average width): The Santa Clara River has a riparian corridor throughout much of the reach at a with of approximately 50-ft. The dominant species is sandbar willow with some cottonwood. There has been an active program to reduce tamarisk within the watershed.

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: NA
- C. SIGNIFICANT NEXUS DETERMINATION: NA THE SANTA CLARA RIVER IS A PERENNIAL STREAM

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: NA
- 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: **4166** linear feet **20** wide.
- Other non-wetland waters: **5.0** acres.

Identify type(s) of waters:

- 3. Non-RPWs⁸ that flow directly or indirectly into TNWs. NA
- 4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs. NA
- 5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs. NA
- 6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. NA
- 7. Impoundments of jurisdictional waters. NA
- 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): NA
- F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY): NA

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:
 - Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
 - Data sheets prepared by the Corps:
 - Corps navigable waters' study:
 - U.S. Geological Survey Hydrologic Atlas:

USGS NHD data. USGS 8 and 12 digit HUC maps. \boxtimes U.S. Geological Survey map(s). Cite scale & quad name: 1:24K; UT-SAINT GEORGE USDA Natural Resources Conservation Service Soil Survey. Citation: \square 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): \boxtimes or Other (Name & Date): Previous determination(s). File no. and date of response letter: Four other projects have occurred within a 1-mile radius of the proposed project area. These included SPK-2008-01857, 2009-00851, S011-000812, and SPK-2011-00026. Jurisdiction was assumed and no JD was done for these projects. Applicable/supporting case law: $\overline{\boxtimes}$ Applicable/supporting scientific literature: Natural Channel Design. 2005. Master Plan: Santa Clara River. Washington County Water Conservancy District. http://www.wcwcd.org/wp-content/uploads/2012/08/Santa-Clara-River-Masater-Plan.pdf Other information (please specify):

B. ADDITIONAL COMMENTS TO SUPPORT JD:

The Santa Clara River is a perennial stream that is tributary to the Virgin River, an interstate, Navigable-in-Fact river that is tributary to the Colorado River, a traditionally navigable water.