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): May 16, 2017

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sacramento District, Silver Creek Estates, SPK-2003-50370-UO

υ.	DISTRICT OFFICE, FILE NAME, AND NUMBER. Sacramento District, Silver Creek Estates, SFR-2003-30370-00
C.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: Utah County/parish/borough: Summit City: Park City Center coordinates of site (lat/long in degree decimal format): Lat. 40.73444°, Long111.495° Universal Transverse Mercator: 12 458203.03 4509396.38 Name of nearest waterbody: East Canyon Creek Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: East Canyon Reservoir Name of watershed or Hydrologic Unit Code (HUC): Lower Weber, 16020102 ☐ 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): 6/9/2015
	CTION II: SUMMARY OF FINDINGS
Α.	RHA SECTION 10 DETERMINATION OF JURISDICTION.
	ere Pick List "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part b) 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:
В.	CWA SECTION 404 DETERMINATION OF JURISDICTION.
The	ere 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): TNWs, including territorial seas Wetlands adjacent to TNWs Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs Non-RPWs that flow directly or indirectly into TNWs Wetlands directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs Impoundments of jurisdictional waters Isolated (interstate or intrastate) waters, including isolated wetlands
	 b. Identify (estimate) size of waters of the U.S. in the review area: Non-wetland waters: linear feet, wide, and/or acres. Wetlands: 0.224 acres. c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):
	2. Non-regulated waters/wetlands (check if applicable): ³ Description 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 Boxes checked below shall be supported by completing the appropriate sections in Section III below.

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

³ Supporting documentation is presented in Section III.F.

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: 40,146 acres
Drainage area: 145 square miles
Average annual rainfall: 24 inches
Average annual snowfall: 41 inches

(ii) Physical Characteristics:

(a) Relationship with TNW:

☐ Tributary flows directly into TNW.

Tributary flows through 1 tributaries before entering TNW.

Project waters are **25-30** river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project waters are 10-15 aerial (straight) miles from TNW.

Project waters are 1 (or less) aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: N/A

Identify flow route to TNW⁵: A tributary flows to the southwest due south of the property in question. This tributary leads to East Canyon Creek, which eventually flows into East Canyon Reservoir, the nearest TNW.

Tributary stream order, if known: N/A

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.

	(b)		neck all that appl made). Explain: nan-altered). Ex			
		Tributary properties with respect to Average width: 4 feet Average depth: 2 feet Average side slopes: Vertical (1		mate):		
		Primary tributary substrate composit Silts Sands Cobbles Grave Bedrock Veget Other. Explain:	·		☐ Concrete ☐ Muck	
		Tributary condition/stability [e.g., high Presence of run/riffle/pool complexed Tributary geometry: Meandering Tributary gradient (approximate aver	s. Explain: None	within		
(c) Flow: Tributary provides for: Intermittent but not seasonal flow Estimate average number of flow events in review area/year: 2-5 Describe flow regime: Tributary receives flow mainly from snowmelt and precipitation additional events may occur due to surrounding agricultural irrigation areas. Other information on duration and volume:			om snowmelt and precipitation, ho	wever,		
		Surface flow is: Discrete and confir aerial photos.	ned. Characteris	tics: obs	ervable meandering depression vis	sible via
		Subsurface flow: Unknown . Explair Dye (or other) test performed				
		Tributary has (check all that apply): ☐ Bed and banks ☐ OHWM ⁶ (check all indicators ☐ clear, natural line impress ☐ changes in the character ☐ shelving ☐ vegetation matted down, ☐ leaf litter disturbed or was ☐ sediment deposition ☐ water staining ☐ other (list): ☐ Discontinuous OHWM. ⁷ Exp	sed on the bank of soil bent, or absent shed away	dest the p sedi	presence of litter and debris truction of terrestrial vegetation presence of wrack line ment sorting ur tiple observed or predicted flow event upt change in plant community	S
		If factors other than the OHWM were apply): High Tide Line indicated by: oil or scum line along sho fine shell or debris depos physical markings/charace tidal gauges other (list):	re objects its (foreshore)	☐ Mea ☐ s ☐ p	al extent of CWA jurisdiction (check al an High Water Mark indicated by: survey to available datum; ohysical markings; vegetation lines/changes in vegetation	
	Cha	nemical Characteristics: paracterize tributary (e.g., water color is characteristics, etc.). Explain: Water is				

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.

⁷lbid.

Identify specific pollutants, if known: East Canyon Creek and East Canyon Reservoir are co-limited by nitrogen and phosphorus, sources of which are largely attributed to residential and commercial developments, construction, and nearby livestock farms.

	(iv)		Riparian corridor. Characteristics (type, average width): Wetland fringe. Characteristics: Sporadic areas of palustrine emergent wetland that line the banks of both the unnamed RPW and East Canyon Creek. Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: East Canyon Reservoir is stocked with fish which migrate upstream into East Canyon Creek. Also, East Canyon Creek has natural populations of trout.
			☐ Other environmentally-sensitive species. Explain findings: ☐ Aquatic/wildlife diversity. Explain findings:
2.	Cha	arac	teristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW
	(i)		Visical Characteristics: General Wetland Characteristics: Properties: Wetland size: Wetland B/C (0.049 acre) and wetland D (0.005 acre) acres Wetland type. Explain: Palustrine Emergent Wetland quality. Explain: Medium quality based on observations. Vegetation is diverse and robust. Project wetlands cross or serve as state boundaries. Explain: No
		(b)	General Flow Relationship with Non-TNW: Flow is: Intermittent flow. Explain: low into and out of this wetland is seasonal and supported from groundwater, precipitation and runoff from surrounding parcels.
			Surface flow is: Overland sheet flow Characteristics: A small swale connects these wetlands with the RPW to the south. The evidence of flow is clear due to wetland plant species growing within the swale and saturation observations off of aerial photographs.
			Subsurface flow: Unknown . Explain findings: Dye (or other) test performed:
		(c)	Wetland Adjacency Determination with Non-TNW: ☐ Directly abutting ☐ Not directly abutting ☐ Discrete wetland hydrologic connection. Explain: A small upland swale connects with the nearest RPW to the south, approximately 275 feet. ☐ Ecological connection. Explain: ☐ Separated by berm/barrier. Explain:
		(d)	Proximity (Relationship) to TNW Project wetlands are 25-30 river miles from TNW. Project waters are 10-15 aerial (straight) miles from TNW. Flow is from: Wetland to navigable waters. Estimate approximate location of wetland as within the 100 - 500-year floodplain.
	(ii)	Cha c Ide	emical Characteristics: aracterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed haracteristics; etc.). Explain: Wetland hydrology is generally clear. ntify specific pollutants, if known: Non-point source pollution from adjacent housing/roads and agricultural ctivities.
	(iii)		Riparian buffer. Characteristics (type, average width): Vegetation type/percent cover. Explain: 100% cover of facultative and obligate vegetative species with a diversity of species. Habitat for: Federally Listed species. Explain findings: Fish/spawn areas. Explain findings: Other environmentally-sensitive species. Explain findings: Aquatic/wildlife diversity. Explain findings:

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

All wetland(s) being considered in the cumulative analysis: 4

Approximately acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	Directly abuts? (Y/N)	Size (in acres)
Υ	0.12		
Υ	0.9		
Υ	1.9		
Υ	0.4		

Summarize overall biological, chemical and physical functions being performed: The onsite wetlands in conjunction with other similarly situated wetlands in the area act to filter chemical pollution from the various nearby agricultural and residential parcels prior to conveying water to the already impaired downstream tributary system.

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:

- 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 0.224 acre of wetland areas shown on the attached map were determined to be jurisdictional. The wetland features on this parcel shows a significant nexus, due to the possible surface connection via sheet flow to nearby tributary leading to the closest TNW, East Canyon Reservoir. East Canyon Reservoir and its main tributary, East Canyon Creek, are listed as impaired for total phosphorus and total nitrogen. The wetlands onsite help to convert and detain pollutants such as fertilizers prior to entering the surface tributary system.

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, wide, 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 wide. Other non-wetland waters: acres. Identify type(s) of waters:
3.	Non-RPWs ⁸ that flow directly or indirectly into TNWs. Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional waters within the review area (check all that apply): Tributary waters: linear feet, wide. 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 A (0.083 acre) and Wetland E (0.115 acre) directly abut the downstream RPW, approximately 400 feet south off property. Hydrology for this tributary has been identified throughout the year on aerial photographs and site visits.
	Provide acreage estimates for jurisdictional wetlands in the review area: 0.198 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 jurisidictional. Data supporting this conclusion is provided at Section III.C.
	Provide acreage estimates for jurisdictional wetlands in the review area: 0.054 acres.
6.	Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs. Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Provide estimates for jurisdictional wetlands in the review area: acres.
7.	Impoundments of jurisdictional waters. ⁹ As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional. Demonstrate that impoundment was created from "waters of the U.S.," or Demonstrate that water meets the criteria for one of the categories presented above (1-6), or Demonstrate that water is isolated with a nexus to commerce (see E below).

 $^{^8\}mbox{See}$ Footnote # 3. 9 To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):10
 □ which are or could be used by interstate or foreign travelers for recreational or other purposes. □ from which fish or 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, wide. Other non-wetland waters: acres. Identify type(s) of waters: Wetlands: 0.224 acres.
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 <u>sole</u> 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, wide. Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply): Non-wetland waters (i.e., rivers, streams): linear feet, wide. Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: Wetlands: acres.
CTION IV: DATA SOURCES.
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. U.S. Geological Survey map(s). Cite scale & quad name: 1:24K; UT-PARK CITY EAST 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)

¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.*

\boxtimes	Photographs: Aerial (Name & Date): Google Earth 1993-2016
	or ☐ 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:

The 2.67 acres site contains a total of 0.224 acres of fresh wet meadow. As identified on the Silver Creek Estates- Unit I, Wetland Delineation Exhibit, Wetland Area A (0.083 acre), Wetland Area B/C (0.049 acre), Wetland Area D (0.005 acre), Wetland Area E (0.115 acre) have been determined to be jurisdictional, since they either directly abut a RPW of the nearest TNW or have a significant nexus with the nearest TNW, East Canyon Reservoir. The significant nexus was determined based on a surface connection, via sheet flow, to a tributary leading to East Canyon Creek, the nearest RPW

Wetland area E (0.115 acre) and A (0.083 acre) directly abut a relatively permanent waterway that flows into East Canyon Creek and into East Canyon Reservoir, the nearest TNW (approximately 11 miles north). These wetlands flow offsite to the south and directly connect with an RPW downstream.

Wetland B/C (0.049 acre) and wetland D (0.005 acre) do have a significant nexus with the nearest TNW, East Canyon Reservoir (approximately 11 miles north). The nearest relatively permanent waterway is approximately 500 feet to the south. A hydrologic surface connection was identified through a swale on historic aerial photographs and the swale being dominated by wetland plant species.