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

Α.	REPORT COMPLETION DATE FOR	APPROVED JURISDICTIONAL DETERMINATION (JD):	August 3, 2009

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sacramento District, Grass Valley Community Recovery Resources, SPK-2009-00551

	2007-00551
c.	PROJECT LOCATION AND BACKGROUND INFORMATION: State: California County/parish/borough: Nevada City: Grass Valley Center coordinates of site (lat/long in degree decimal format): Lat. 39.232096° N, Long. 121.048280° W Universal Transverse Mercator: 10 668455.93 4344348.02 Name of nearest waterbody: Matson Creek Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Feather River Name of watershed or Hydrologic Unit Code (HUC): Upper Bear. California, 18020126 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: July 24, 2009 ☐ Field Determination. Date(s): April 27, 2009
SEC A.	CTION II: SUMMARY OF FINDINGS RHA SECTION 10 DETERMINATION OF JURISDICTION.
revi	re Are no "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the ew 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: CWA SECTION 404 DETERMINATION OF JURISDICTION.
	re 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 waters ² (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: width (ft) and/or acres. Wetlands: 0.166 acres (Wetland Swales 1 and 2 are being considered together).
	c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual Elevation of established OHWM (if known):
	 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.

SECTION III: CWA ANALYSIS

Explain:

A. TNWs AND WETLANDS ADJACENT TO TNWs

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).

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 aquat	tic 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 waterbody 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: Pick List	
	Drainage area: Pick List	
	Average annual rainfall: inches	
	Average annual snowfall: inches	
(ii)	Physical Characteristics:	
	(a) Relationship with TNW:	
	☐ Tributary flows directly into TNW.	
	☐ Tributary flows through Pick List tributaries before entering T	NW.
	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 state boundaries. Explain:	
	Identify flow route to TNW ⁵ :	
	Tributary stream order, if known:	
	(b) General Tributary Characteristics (check all that apply):	
	Tributary is: Natural	
	Artificial (man-made). Explain:	
	Manipulated (man-altered). Explain:	

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 properties with respect to top of bank (estimate): Average width: feet Average depth: feet Average side slopes: Pick List.
	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: Tributary geometry: Pick List Tributary gradient (approximate average slope): %
(c)	Flow: Tributary provides for: Pick List Estimate average number of flow events in review area/year: Pick List Describe flow regime: Other information on duration and volume:
	Surface flow is: Pick List. Characteristics: .
	Subsurface flow: Pick List. Explain findings: Dye (or other) test performed:
	Tributary has (check all that apply): Bed and banks OHWM ⁶ (check all indicators that apply): clear, natural line impressed on the bank changes in the character of soil destruction of terrestrial vegetation the presence of wrack line sediment sorting leaf litter disturbed or washed away sediment deposition water staining other (list): Discontinuous OHWM. 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:
Cha	emical Characteristics: racterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.) Explain: .tify specific pollutants, if known:
Biol	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:

(iii)

(iv)

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.

Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW **Physical Characteristics:** (a) General Wetland Characteristics: Properties: Wetland size: 0.166 acres Wetland type. Explain: palustrine emergent non-persistent. Wetland quality. Explain: moderate to good, good diversity of vegetative species, altered by construction of roads, private residence, and recreational facility (golf course). Project wetlands cross or serve as state boundaries. Explain: (b) General Flow Relationship with Non-TNW: Flow is: **Ephemeral flow**. Explain: Flow may be intermittent, but site visits were not conducted after precipitation events to determine if discharge was continuing from Wetland Swales 1 and 2. Surface flow is: Discrete and confined Characteristics: Flow continues offsite where it enters a ditch, which conveys flow to a storm drain system, which discharges directly into Matson Creek. 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: Wetland Swale 2 continues offsite and enters a ditch, which discharge to a storm drain system. Storm drain system discharges to Matson Creek. ☐ Ecological connection. Explain: Separated by berm/barrier. Explain: Small artificial berm separates Wetland Swale 1 from Wetland Swale 2. (d) Proximity (Relationship) to TNW Project wetlands are **30 (or more)** river miles from TNW. Project waters are 25-30 aerial (straight) miles from TNW. Flow is from: Wetland to navigable waters. Estimate approximate location of wetland as within the **Pick List** floodplain. (ii) Chemical Characteristics: Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: No standing water was present at the time of the Corps' April 27, 2009, site visit. Wetland was saturated. Watershed includes low-density residential development with associated roadways, natural foothill woodland setting generally intact, approximately 5 acres. Identify specific pollutants, if known: Roadside runoff, recreational facility and residential runoff (fertilizers, etc. from golf course and residential landscaping).

	(iii) Bid	ological Characteristics. Wetland supports (check all that apply):
		Riparian buffer. Characteristics (type, average width): .
	$\overline{\boxtimes}$	Vegetation type/percent cover. Explain: FACW/100%.
	$\overline{\boxtimes}$	Habitat for:
		Federally Listed species. Explain findings:
		Fish/spawn areas, Explain findings:
		Other environmentally-sensitive species. Explain findings:
		Aquatic/wildlife diversity. Explain findings: Wetland Swales 1 and 2 provides habitat supporting foothill woodland
diversity.		

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

All wetland(s) being considered in the cumulative analysis: 3

Approximately 0.425 acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)	Size (in acres)	<u>Directly abuts? (Y/N)</u>	Size (in acres)
N	0.258	N	0.021
N	0.145		

Summarize overall biological, chemical and physical functions being performed: Seep 1 and Wetland Swales 1 and 2 provide habitat diversity within the foothill woodland habitat, retain precipitation runoff and groundwater seepage, filter water passing through wetlands, and convey water to offsite storm drains which discharge directly to Matson Creek, which is tributary to Wolf Creek, which is tributary to the Bear River, which is tributary to the Feather River, a navigable water of the United States.

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:
- 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: Wetland Swales 1 and 2, in combination with Seep 1 and Matson Creek, have a significant nexus with the Feather River, a navigable water of the Unites States. Wetland Swales 1 and 2 are being considered together as they are part of the same wetland complex which has been altered as the result of construction of roads, a private residence, and a recreational facility (golf course). Wetland Swale 1 has been ditched along Brentwood Drive with several culverts placed within the ditch. A berm, as the result of excavation of the ditch, separates Wetland Swale 1 from Wetland Swale 2, although thick willow and blackberry growth on and around the berm may obscure a direct connection between the swales, but the vegetation also supports the conclusion that there is a shallow subsurface hydrologic connection which supports the vegetation growth. Wetland Swales 1 and 2 continue offsite and intersect a ditch, which conveys flow to a storm drain inlet. Along East Main Street (mislabeled Frontier Road), where the main trunk of the storm drain system is located, placards in the pavement next to additional inlets read, "No Dumping. Drains to Creek." The storm drain system discharges to Matson Creek, which is tributary to Wolf Creek, which is tributary to the Bear River, which is tributary to the Feather River, a navigable water of the United States. Wetland Swales 1 and 2 have the capacity to carry pollutants (landscaping chemicals from recreational facility-golf course- and residential landscaping, trash, roadside runoff-oil, gas, etc.) and precipitation runoff to the TNW. Wetland Swales 1 and 2 also have the capacity to retain and reduce the amount of pollutants and precipitation runoff reaching the TNW through filtration and retention of runoff. Due to distance from the TNW and separation from Matson Creek by the storm drain system, Wetland Swales 1 and 2 likely do not provide habitat for species present in the TNW. Wetland Swales 1 and 2 do have the capacity to convey nutrients to support downstream foodwebs.

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

1.	TNWs and Ad	jacent Wetlands.	Check all that app	ly and provide size estimates in review area:
	TNWs:	linear feet	width (ft), Or,	acres.
	Wetlands ad	djacent 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:
	Pro	vide 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.		n-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.
	Pro	vide 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.	We	tlands 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:
	Pro	vide acreage estimates for jurisdictional wetlands in the review area: acres.
5.	We ⊠	tlands 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.
	Pro	vide acreage estimates for jurisdictional wetlands in the review area: 0.166 acres.
6.	We	tlands 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 with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.
	Pro	vide estimates for jurisdictional wetlands in the review area: acres.
7.	As a	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).
SUC	GRA CH V whice from whice Inter	TED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY WATERS (CHECK ALL THAT APPLY): 10 ch are or could be used by interstate or foreign travelers for recreational or other purposes. In which fish or shellfish are or could be taken and sold in interstate or foreign commerce. The are or could be used for industrial purposes by industries in interstate commerce. The are or could be used waters. Explain: The factors. Explain:

E.

⁸See Footnote # 3.

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

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.

	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.
	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, width (ft). Lakes/ponds: acres. Other non-wetland waters: acres. List type of aquatic resource: . Wetlands: acres.
SEC	CTION 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: April 20, 2009, Appendix C, Wetland Delineation Map, CoRR Study Area, Grass Valley, Nevada County, California, prepared by North Fork Associates. 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: http://water.usgs.gov/GIS/huc_name.html#Region18. USGS NHD data. USGS 8 and 12 digit HUC maps. U.S. Geological Survey map(s). Cite scale & quad name: 1:24K; CA-GRASS VALLEY USDA Natural Resources Conservation Service Soil Survey. Citation: Soil Survey of Nevada County Area, California, 1993. National wetlands inventory map(s). Cite name: Grass Valley Quadrangle. State/Local wetland inventory map(s): FEMA/FIRM maps: 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929) Photographs: Aerial (Name & Date): NAIP 2005, ESRI 2007. or Other (Name & Date): Site photographs, North Fork Associates, March 25, 2009.
	Previous determination(s). File no. and date of response letter: Applicable/supporting case law: Applicable/supporting scientific literature: Other information (please specify): Wetland Swales 1 and 2 are being considered together as they are part of the same wetland complex which has been altered as the result of construction of roads, a private residence, and a recreational facility (golf course). A conversation on July 24, 2009, with Trisha Tillotson, City of Grass Valley, confirmed that the storm drain mentioned in this form conveys flow to Matson Creek.

B. ADDITIONAL COMMENTS TO SUPPORT JD: This office does not concur with the April 20, 2009, Wetland Delineation for the +/-4.5-Acre Community Recovery Resources Study Area, Grass Valley, Nevada County, California, report prepared by North Fork Associates. However, this office does concur with the April 20, 2009, Appendix C, Wetland Delineation Map, CoRR Study Area, Grass Valley, Nevada County, California, map prepared by North Fork Associates.