

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): 27-May-2008

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Sacramento District, SPK-2008-00279-JD1

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State : CA - California
County/parish/borough: Butte
City: Chico
Lat: 39.75368695
Long: -121.81885874
Universal Transverse Mercator: []
Name of nearest waterbody: Lindo Channel
Name of nearest Traditional Navigable Water (TNW): Sacramento River
Name of watershed or Hydrologic Unit Code (HUC): 18020103

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 the action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION:

Office Determination Date:

06-May-2008

Field Determination Date

(s):

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION

There "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area.

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

1. Waters of the U.S.**a. Indicate presence of waters of U.S. in review area:¹**

Water Name	Water Type(s) Present
Intermittent Stream, IS-1, Lindo Channel	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs
Riparian Wetland 1-5, Lindo Channel	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

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

Area: (m²)

Linear: (m)

c. Limits (boundaries) of jurisdiction:

based on: Established by
OHWM.

OHWM Elevation: (if known)

2. Non-regulated waters/wetlands: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****1. TNW**

Not Applicable.

2. Wetland Adjacent to TNW

Not Applicable.

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

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

(i) General Area Conditions:

Watershed size: []
 Drainage area: []
 Average annual rainfall: inches
 Average annual snowfall: inches

(ii) Physical Characteristics

(a) Relationship with TNW:

Tributary flows directly into TNW.
 Tributary flows through [] tributaries before entering TNW.
 :Number of tributaries

Project waters are [] river miles from TNW.
 Project waters are [] river miles from RPW.
 Project Waters are [] aerial (straight) miles from TNW.
 Project waters are [] 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:

Order	Tributary Name
7	Intermittent Stream, IS-1, Lindo Channel

(b) General Tributary Characteristics:

Tributary is:

Tributary Name	Natural	Artificial	Explain	Manipulated	Explain
Intermittent Stream, IS-1, Lindo Channel	-	-	-	X	Much of this tributary has been mined for its natural volcanic bedrock, gravel, and gold. Currently, the bordering riparian corridor has been filled with the tailings from earlier historic mining. Flows are also managed through a diversion channel to up to 1,500 cfs.

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

Tributary Name	Width (ft)	Depth (ft)	Side Slopes
Intermittent Stream, IS-1, Lindo Channel	45	5	3:1

Primary tributary substrate composition:

Tributary Name	Silt	Sands	Concrete	Cobble	Gravel	Muck	Bedrock	Vegetation	Other
Intermittent Stream, IS-1, Lindo Channel	-	-	-	X	X	-	X	-	-

Tributary (conditions, stability, presence, geometry, gradient):

Tributary Name	Condition/Stability	Run/Riffle/Pool Complexes	Geometry	Gradient (%)
Intermittent Stream, IS-1, Lindo Channel	Volcanic Rock bed, typically highly stable.	The presence of cobble and gravels with the volcanic rockbed create a riffle and pool complex tributary during flows.	Relatively straight	45

(c) Flow:

Tributary Name	Provides for	Events Per Year	Flow Regime	Duration & Volume
Intermittent Stream, IS-1, Lindo Channel	Seasonal flow	2-5	Water is diverted upstream from the Sycamore Diversion Channel, into the Lindo Channel, which flows to Big Chico Creek. Big Chico Creek flows to the Sacramento River. Lindo Channel flows seasonally when water is diverted and carries approximately 1,500 cfs of water through to the Sacramento River, which is approximately 1.5 miles away.	-

Surface Flow is:

Tributary Name	Surface Flow	Characteristics
Intermittent Stream, IS-1, Lindo Channel	Confined	Volcanic Rock bed, typically highly stable banks.

Subsurface Flow:

Tributary Name	Subsurface Flow	Explain Findings	Dye (or other) Test
Intermittent Stream, IS-1, Lindo Channel	Unknown	-	-

Tributary has:

Tributary Name	Bed & Banks	OHWM	Discontinuous OHWM ⁷	Explain
Intermittent Stream, IS-1, Lindo Channel	X	X	-	-

Tributaries with OHWM⁶ - (as indicated above)

Tributary Name	OHWM	Clear	Litter	Changes in Soil	Destruction Vegetation	Shelving	Wrack Line	Matted/Absent Vegetation	Sediment Sorting	Leaf Litter	Scour	Sediment Deposition	Flow Events	Water Staining	Changes Plant	Other
Intermittent Stream, IS-1, Lindo Channel	X	X	X	X	-	-	-	X	-	X	X	-	-	-	-	-

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction:

High Tide Line indicated by:

Not Applicable.

Mean High Water Mark indicated by:

Not Applicable.

(iii) Chemical Characteristics:

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

Tributary Name	Explain	Identify specific pollutants, if known
Intermittent Stream, IS-1, Lindo Channel	water color not observed.	unknown

(iv) Biological Characteristics. Channel supports:

Tributary Name	Riparian Corridor	Characteristics	Wetland Fringe	Characteristics	Habitat
Intermittent Stream, IS-1, Lindo Channel	X	Shrub-scrubb Riparian woodland.	-	-	-

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

(i) Physical Characteristics:

(a) General Wetland Characteristics:

Properties:

Wetland Name	Size (Acres)	Wetland Type	Wetland Quality	Cross or Serve as State Boundaries. Explain
Riparian Wetland 1-5, Lindo Channel	.08	-	-	-

(b) General Flow Relationship with Non-TNW:

Flow is:

Not Applicable.

Surface flow is:

Wetland Name	Flow	Characteristics
Riparian Wetland 1-5, Lindo Channel	-	-

Subsurface flow:

Wetland Name	Subsurface Flow	Explain Findings	Dye (or other) Test
Riparian Wetland 1-5, Lindo Channel	-	-	-

(c) Wetland Adjacency Determination with Non-TNW:

Wetland Name	Directly Abutting	Discrete Wetland Hydrologic Connection	Ecological Connection	Separated by Berm/Barrier
Riparian Wetland 1-5, Lindo Channel	No	-	-	-

(d) Proximity (Relationship) to TNW:

Wetland Name	River Miles From TNW	Aerial Miles From TNW	Flow Direction	Within Floodplain
Riparian Wetland 1-5, Lindo Channel	-	-	-	-

(ii) Chemical Characteristics:

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

Wetland Name	Explain	Identify specific pollutants, if known
Riparian Wetland 1-5, Lindo Channel	-	-

(iii) Biological Characteristics. Wetland supports:

Wetland Name	Riparian Buffer	Characteristics	Vegetation	Explain
Riparian Wetland 1-5, Lindo Channel	-	-	-	-

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

All wetlands being considered in the cumulative analysis:

Not Applicable.

Summarize overall biological, chemical and physical functions being performed:

Not Applicable.

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.

Significant Nexus: Not Applicable

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE:

1. TNWs and Adjacent Wetlands:

Not Applicable.

2. RPWs that flow directly or indirectly into TNWs:

Wetland Name	Flow	Explain
Intermittent Stream, IS-1, Lindo Channel	SEASONAL	Stream has intermittent flow supported by rain fall, and groundwater. Lindo Channel flows to Big Chico Creek. Big Chico Creek Flows to the Sacramento River.

Provide estimates for jurisdictional waters in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m ²)
Intermittent Stream, IS-1, Lindo Channel	Relatively Permanent Waters (RPWs) that flow directly or indirectly into TNWs	-	1327.368768
Total:		0	1327.368768

3. Non-RPWs that flow directly or indirectly into TNWs:⁸

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

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

Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:

Wetland Name	Type	Size (Linear) (m)	Size (Area) (m ²)
Riparian Wetland 1-5, Lindo Channel	Wetlands directly abutting RPWs that flow directly or indirectly into TNWs	-	307.561056
Total:		0	307.561056

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

Not Applicable.

Provide acreage estimates for jurisdictional wetlands in the review area:

Not Applicable.

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

Not Applicable.

Provide estimates for jurisdictional wetlands in the review area:

Not Applicable.

7. Impoundments of jurisdictional waters:⁹

Not Applicable.

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:¹⁰

Not Applicable.

Identify water body and summarize rationale supporting determination:

Not Applicable.

Provide estimates for jurisdictional waters in the review area:

Not Applicable.

F. NON-JURISDICTIONAL WATERS. INCLUDING WETLANDS

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):

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

Not Applicable.

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.

Not Applicable.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD

(listed items shall be included in case file and, where checked and requested, appropriately reference below):

Data Reviewed	Source Label	Source Description
--Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant	Draft Delineation of waters of the United States	Verbena Fields, Draft Delineation of waters of the United States, Roger Cole, February 2008.

B. ADDITIONAL COMMENTS TO SUPPORT JD:

Not Applicable.

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.

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.

6-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.

7-Ibid.

8-See 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.