Appendix D

Jurisdictional Delineation Report

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003
805-644-4455

March 14, 2024
Rincon Project No: 23-15199

Tania Asef, Associate Environmental Specialist
The Metropolitan Water District of Southern California
700 North Alameda Street
Los Angeles, California, 90012
Via email: TAsef@mwdh2o.com

Subject: Jurisdictional Delineation for the Casa Loma Siphon No. 1 and San Jacinto Pipeline Project, Riverside County, California

Dear Ms. Asef,

This report has been prepared by Rincon Consultants, Inc. (Rincon) to assist The Metropolitan Water District of Southern California (Metropolitan) with project planning, and for use by the United States Army Corps of Engineers (USACE) to confirm extent of potential jurisdiction under Section 404 of the Clean Water Act, the Regional Water Quality Control Board (RWQCB), to confirm extent of potential jurisdiction pursuant to Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act, and the California Department of Fish and Wildlife (CDFW) to confirm potential jurisdiction pursuant to California Fish and Game Code (CFGC) Section 1600 *et seq*.

This Jurisdictional Delineation identified one feature, the San Jacinto River, that is likely subject to agency jurisdiction.

Project Description

Metropolitan is a regional water wholesaler for 26 public agency members that provide drinking water to approximately 19 million people in parts of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties.

During storm activity in early 2023, accelerated flows within the San Jacinto River exposed an approximate 200-foot-long segment of Metropolitan's Casa Loma Siphon No. 1 Pipeline. In response to the emergency, Metropolitan installed protective measures to achieve temporary protection of the pipelines until a permanent solution could be developed. Metropolitan is now proposing a permanent engineering solution within the approximate 20-acre Project site to properly cover the three existing pipelines (CRA Siphon, San Jacinto Pipeline and Casa Loma Canal Siphon).

Project Location

The Project site encompasses an approximate 20-acre area located within and adjacent to the San Jacinto River, between Soboba Road and State Street, near the city of San Jacinto, unincorporated Riverside County, California (Attachment 1, Figure 1 and Figure 2). The Project site is depicted on the United States Geological Survey (USGS) *San Jacinto, California,* 7.5-minute topographic map within Township 4 South, Range 1 West, Section 15, San Bernardino Baseline and Meridian (33.820600°, -116.969914°).

Methods

A literature review and field delineation were conducted to identify, describe, and map potential jurisdictional waters within the Study Area (i.e., the Project site plus a 100-foot buffer). The literature review and field delineation were conducted in accordance with USACE, RWQCB, and CDFW procedures as outlined below. Photographs of the Study Area and data sheets from the field delineation are provided in Attachments 2 and 3, respectively.

Literature Review

Prior to the field survey, Rincon reviewed aerial imagery (Google Earth Pro 2024) of the Study Area, the *San Jacinto, California* U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle (USGS 2024a), the Web Soil Survey (United States Department of Agriculture, Natural Resources Conservation Service [USDA, NRCS] 2024c), and the National Hydric Soils List by State (USDA, NRCS 2024b). These resources were reviewed to better characterize the site and its surroundings from a hydrologic, geologic, and topographic perspective and to determine if any soil units mapped in the Study Area were classified as hydric. Additionally, the National Wetlands Inventory (NWI; United States Fish and Wildlife Service [USFWS] 2024) and the National Hydrography Dataset (NHD; USGS 2023b) were reviewed to determine if any potential jurisdictional waters were mapped within the Study Area.

Field Delineation

On January 8, 2024, Rincon Biologists Kevin Gugerty and Jared Reed surveyed the accessible portions of the Study Area. The Study Area was surveyed on foot to delineate the potential jurisdictional waters. Current federal and state policies, methods, and guidelines were used to identify and delineate potential jurisdictional waters and are summarized in the subsections below and in detail in Attachment 4.

During the field delineation, Rincon took photographs of potential jurisdictional waters and the surrounding areas (Attachment 2). General site characteristics were noted, and vegetation present within the Study Area was documented. Data collection focused on potential jurisdictional waters, and sample points were taken in areas that best represented the conditions of that feature (Attachment 3).

The extent of potential jurisdictional waters, ordinary high water mark (OHWM) sample points, and vegetation community/land cover type boundaries were mapped in the field with the use of a Global Positioning System unit capable of sub-meter accuracy.

Wetland Waters of the U.S.

Potential wetland features were evaluated for the presence of wetland indicators; specifically, hydrophytic vegetation, hydric soils, and wetland hydrology, according to routine delineation procedure within the *Wetlands Delineation Manual* (USACE 1987) and *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008a). The USACE Arid West 2020 Regional Wetland Plant List was used to determine the indicator status of the examined vegetation by the following indicator status categories: Upland (UPL), Facultative Upland (FACU), Facultative (FAC), Facultative Wetland (FACW), and Obligate Wetland (OBL; Lichvar et al. 2020). If a potential wetland is present within the Study Area, representative sample points would be taken in the areas most likely to exhibit wetland characteristics (i.e., the prevalence of hydrophytic vegetation, hydrology, and suitable topography) and examined in the field to determine if it meets all three wetland parameters. Sample points were not conducted in areas with an obvious prevalence of upland vegetation or in areas where the topography would not support wetland features. Adjacent wetlands are "waters of the U.S" only if there is a continuous surface connection between the potential wetland and a navigable or relatively permanent water body (Environmental Protection Agency [EPA] 2023).

Non-Wetland Waters of the U.S.

The lateral limits of USACE jurisdiction for non-wetland waters were determined by the presence of physical characteristics indicative of the OHWM. The OHWM was identified in accordance with the applicable Code of Federal Regulations (CFR) sections (33 CFR 328.3 and 33 CFR 328.4) and Regulatory Guidance Letter 05-05 (USACE 2005), as well as in reference to various relevant technical publications, including, but not limited to, *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b). The regulations were also reviewed in the determination of non-jurisdictional features (e.g., roadway ditches excavated in uplands). The *Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2010) was completed for all potential non-wetland waters of the U.S. within the Study Area.

Additionally, Rincon evaluated sources of water, streamflow period, connections to Navigable Waters or Traditional Navigable Waters (TNWs), and other factors that affect whether waters qualify as "waters of the U.S." under current USACE regulations (33 CFR 328.3), including, but not limited to, the recent *Sackett v. USEPA* court ruling and the conforming *Revised Definition of Waters of the United States* (United States Environmental Protection Agency [USEPA] 2023).

Waters of the State

The limits of non-wetland "waters of the State," as defined under the Section 401 of the Clean Water Act and Porter-Cologne Water Quality Control Act, were determined to extend out to the lateral extent of the stream's OHWM based on current interpretation of jurisdiction by the Santa Ana RWQCB. Therefore, the lateral extent of the delineated boundaries for non-wetland waters of the State includes all streams up to the OHWM within the Study Area.

Additionally, potential State wetland features were evaluated pursuant to *State Wetland Definition and Procedures for Discharges of Dredged or Fill* (State Water Resources Control Board [SWRCB] 2019) which acknowledges that waters of the State should be delineated using the standard USACE wetland delineation procedures and proclaims that the SWRCB takes jurisdiction over isolated wetlands.

CDFW Streambed

The extent of potential streambeds, streambanks, and riparian habitat subject to CDFW jurisdiction under Section 1600 *et seq*. of the CFGC was delineated by reviewing the topography and morphology of potentially jurisdictional features to determine the outer limit of riparian vegetation, where present, or the tops of banks for stream features.

Existing Setting

Topography and Land Use

The Study Area is located within and adjacent to the San Jacinto River at the north end the San Jacinto River Valley and has a relatively uniform elevation at approximately 1,500 feet above mean sea level. Topographic features visible from the Study Area include the San Jacinto Mountains adjoining the northeast side of the Study Area.

Existing land use within the Study Area consists of recreational open space. Low- and medium-density residential areas are located to the west and south of the Study Area and mixed-use and open space areas are located to the north, northwest, and east of the Study Area. Riprap reinforces the southern end of the San Jacinto Riverbank, and a man-made berm creates the northern bank adjacent to the river within the Study Area.

Hydrology

The Study Area is within the San Jacinto River Wash watershed, Hydrological Unit Code (HUC) 18070202 (USGS 2024b). The Study Area contains a portion of the San Jacinto River, which is classified by the National Wetlands Inventory as a Riverine System (USFWS 2023c). The river is classified as an intermittent streambed that is intermittently flooded and is approximately 150 feet wide within the Study Area. The San Jacinto River is approximately 42 miles long, flows in a northernly direction and drains into Canyon Lake, which is used for recreational activity including boating.

Soils

Four soil types occur within the Study Area (USDA NRCS 2023a):

- Dello loamy sand, 0 to 5 percent slopes (DgB)
- Riverwash (RsC)
- Tujunga loamy sand, channeled, 0 to 8 percent slopes (TvC)
- Soboba cobbly loamy sand, 2 to 25 percent slopes (SrE)

The majority of the Study Area is mapped as Riverwash, which is considered hydric (USDA NRCS 2023b; Figure 3).

Vegetation and Other Land Cover

Vegetation communities documented in the Study Area include Fremont cottonwood woodland, upland mustards, and fourwing saltbush scrub. Developed/disturbed was the only other land cover type documented in the Study Area (Figure 4). Brief descriptions of the vegetation communities present in the Study Area are provided below.

One special status plant species, chaparral sand verbena (*Abronia villosa* var. *aurita*), was also observed within the Study Area. An individual plant as well as a small population of this species were observed in the Fremont cottonwood woodland. Another individual plant was also observed on the edge of a developed/disturbed area adjacent to upland mustards.

Fremont Cottonwood Woodland

Fremont cottonwood woodland (*Populus fremontii* Woodland Alliance) is a vegetation community characterized by Fremont cottonwood (*Populus fremontii* ssp. *fremontii*) in the tree canopy with willows (*Salix* spp.) and other riparian trees, such as western sycamore (*Platanus racemosa*). The tree canopy is typically continuous to open, the shrub layer intermittent to open, and the herbaceous layer variable (Sawyer et al. 2009). This alliance can be found on floodplains, along low-gradient rivers, perennial or seasonally intermittent streams, and springs; and in canyons, alluvial fans, and valleys with a dependable subsurface water supply that varies considerably during the year.

Fremont cottonwood woodland is found throughout the Study Area, within the San Jacinto River. Fremont cottonwood is dominant in the tree layer, with Goodding's black willow (*Salix gooddingii*) a common species. The shrub layer is open and contains large areas of unvegetated river channel with scattered stands of mulefat (*Baccharis salicifolia*). This community comprises approximately 11.77 acres of the Study Area.

Upland Mustards

Upland mustards (*Brassica nigra* Herbaceous Semi-Natural Alliance) is a vegetation community typically found in fallow fields, grasslands, roadsides, levee slopes, disturbed coastal scrub, riparian areas, cleared roadsides, and waste places at elevations between 0 and 9,186 feet (0 and 2,800 meters) above mean sea level. Black mustard (*Brassica nigra*), summer mustard (*Hirschfeldia incana*), wild radish (*Raphanus sativus*), or other mustards occur with non-native plants at over 80 percent cover in the herbaceous layer.

In the Study Area, shortpod mustard is co-dominant with Russian thistle (*Salsola tragus*) and common stork's bill (*Erodium cicutarium*), forming a dense herbaceous layer. This alliance occupies areas outside the main channel of the San Jacinto River that appear to have been disturbed in the past, especially throughout the northeastern portion of the Study Area. The Study Area contains 6.73 acres of this alliance.

Fourwing Saltbush Scrub

Fourwing saltbush scrub (*Atriplex canescens* Shrubland Alliance) is a vegetation community typically found on playas, old beaches and shores, lake deposits, dissected alluvial fans, rolling hills or channel beds at elevations between 246 and 4,921 feet (74 and 1,500 meters) above mean sea level. Soils are generally carbonate rich, alkaline, sandy, or sandy clay loams. Fourwing saltbush scrub is characterized by an open to intermittent shrub canopy and a variable herbaceous layer composed of seasonal herbs and non-native grasses. Fourwing saltbush has over two percent absolute cover and over 50 percent relative cover in the shrub layer (Sawyer et al. 2009).

In the Study Area, this vegetation community is co-dominated by fourwing saltbush (*Atriplex canescens*), red brome (*Bromus rubens*) and horsewheat (*Triticum aestivum*). It is found in the northwest buffer of the Study Area, and in a few areas in the northeast portion of the Study Area. This alliance occupies approximately 3.06 acres of the Study Area.

Disturbed Fourwing Saltbush Scrub

Stands of disturbed fourwing saltbush scrub occur in the northern portion of the Study Area in the buffer area across Soboba Road. This community is similar in species composition to fourwing saltbush scrub, as described above, but is sparser with large areas of bare or disturbed ground between shrubs and herbaceous vegetation. The Study Area contains 0.81 acre of disturbed fourwing saltbush scrub.

Developed/Disturbed

The developed/disturbed land cover type typically includes residential buildings, other infrastructure, and paved areas with little to no vegetation (e.g., paved roads). Developed/disturbed areas are present throughout the Study Area, specifically within Soboba Road and dirt roads within the Project site as well as along the northern and southern buffers of the Study Area. The Study Area contains approximately 7.29 acres of developed/disturbed land cover.

Field Results and Discussion

Based on the field delineation, the portion of the San Jacinto River within the Study Area is likely subject to the jurisdiction of the USACE, RWQCB, and CDFW. The location and extent of potentially jurisdictional portions of the river are depicted in Figure 5. The area and length of each agency's potential jurisdiction are summarized in Table 1, representative photographs are provided in Attachment 2, and wetland sampling point and OHWM forms are compiled in Attachment 3.

Within the Study Area, the San Jacinto River contains banks that range approximately 270 feet to 405 feet wide, averaging 10 feet deep from top of bank. The OHWM ranges from approximately 270 feet to 400 feet wide, and was defined by a break in bank slope, change in average sediment texture, and change in vegetation cover. The river was dry at the time of the survey, but hydrologic indicators such as sediment and drift deposits were present. The substrate consists of mostly unvegetated coarse sand with large benches of mature Fremont cottonwood. The Fremont cottonwoods extend beyond the OHWM to the top of bank and provide a riparian canopy which is likely hydrologically connected to the San Jacinto River. The presence of Fremont cottonwoods indicates presence of water more frequently than exclusively during or immediately after rainfall. Accordingly, the San Jacinto River likely contains an intermittent flow regime.

One wetland sampling point ("SP01"), illustrated in Figure 5, was examined below the OHWM of the river in the low flow channel where hydrophytic vegetation was observed. SP01 did not demonstrate a dominance of hydrophytic vegetation but satisfied the parameter for wetland hydrology via secondary indicators (drift deposits and sediment deposits). Soils were consistent with Riverwash, which are classified as hydric. Soils were closely analyzed for redox concentrations potentially indicating problematic hydric soils associated with vegetated sand and gravel bars within floodplains. However, no redox concentrations were observed, indicating that soils at SP01 are not hydric. The reach of the San Jacinto River present in the Study Area was therefore mapped as a non-wetland waterway.

Since the portion of the San Jacinto River within the Study Area is an intermittent stream that conveys surface flow directly into Canyon Lake, a USACE-defined Navigable Water, the limits of the OHWM within the channel are assumed to be a non-wetland water of the U.S. subject to the jurisdiction of the USACE. Additionally, the limits within the extent of the channel's OHWM will likely be considered a non-wetland water of the State subject to the jurisdiction of the Santa Ana RWQCB. Last, the limits within the extent of the channel's top of banks or the extent of the riparian canopy, whichever is greater, will likely be considered streambed subject to the jurisdiction of the CDFW.

Summary of Jurisdictional Areas

Potentially jurisdictional areas within the Study Area are identified below in Table 1 and Figure 5.

Table 1 USACE, RWQCB, and CDFW Jurisdictional Area

Feature	Non-Wetland Waters of the U.S.[1] (acres/linear feet)	Non-Wetland Waters of the State[1] (acres/linear feet)	CDFW Jurisdictional Streambed[2] (acres/linear feet)
San Jacinto River	7.82/1,307	7.82/1,307	12.27/1,307

[1] Calculated to OHWM

[2] Calculated to top of bank or edge of riparian

The findings and conclusions presented in this report, including the location and extent of areas subject to regulatory jurisdiction, represent the professional opinion of the consultant biologists.

These findings and conclusions should be considered preliminary and at final discretion of the applicable resource agency.

Conclusions and Recommendations

Project-related impacts to San Jacinto River are likely subject to regulation by the USACE pursuant to Section 404 of the CWA, the Santa Ana RWQCB pursuant to Section 401 of the CWA and the Porter-Cologne Water Quality Control Act, and the CDFW pursuant to Section 1600 *et seq.* of the CFGC.

Impacts to jurisdictional waters should be avoided or minimized during project design to the extent feasible, including discharge of dredged or fill material or otherwise modifying potentially jurisdictional features. A Pre-Construction Notification would likely need to be submitted to the USACE for use of Nationwide Permit (NWP) 3 (Maintenance), or an alternative NWP based on input from the USACE, pursuant to Section 404 of the CWA to authorize impacts anticipated to non-wetland waters of the U.S. Additionally, an individual CWA Section 401 Certification Application for Dredge or Fill would need to be submitted to the Santa Ana RWQCB to authorize impacts to non-wetland waters of the State. Last, a Streambed Alteration Agreement notification would need to be submitted to the CDFW for impacts to CDFW jurisdictional streambed.

Sincerely,
Rincon Consultants, Inc.

Kevin Gugerty
Biologist

Robin Murray
Senior Biologist

Steven J. Hongola
Principal Biologist

Attachments

Attachment 1 Figures

Attachment 2 Representative Site Photographs

Attachment 3 Wetland Determination Data Forms, OHWM Forms, Data Summary

Attachment 4 Regulatory Framework

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Attachment 1

Figures

Figure 1 Regional Location

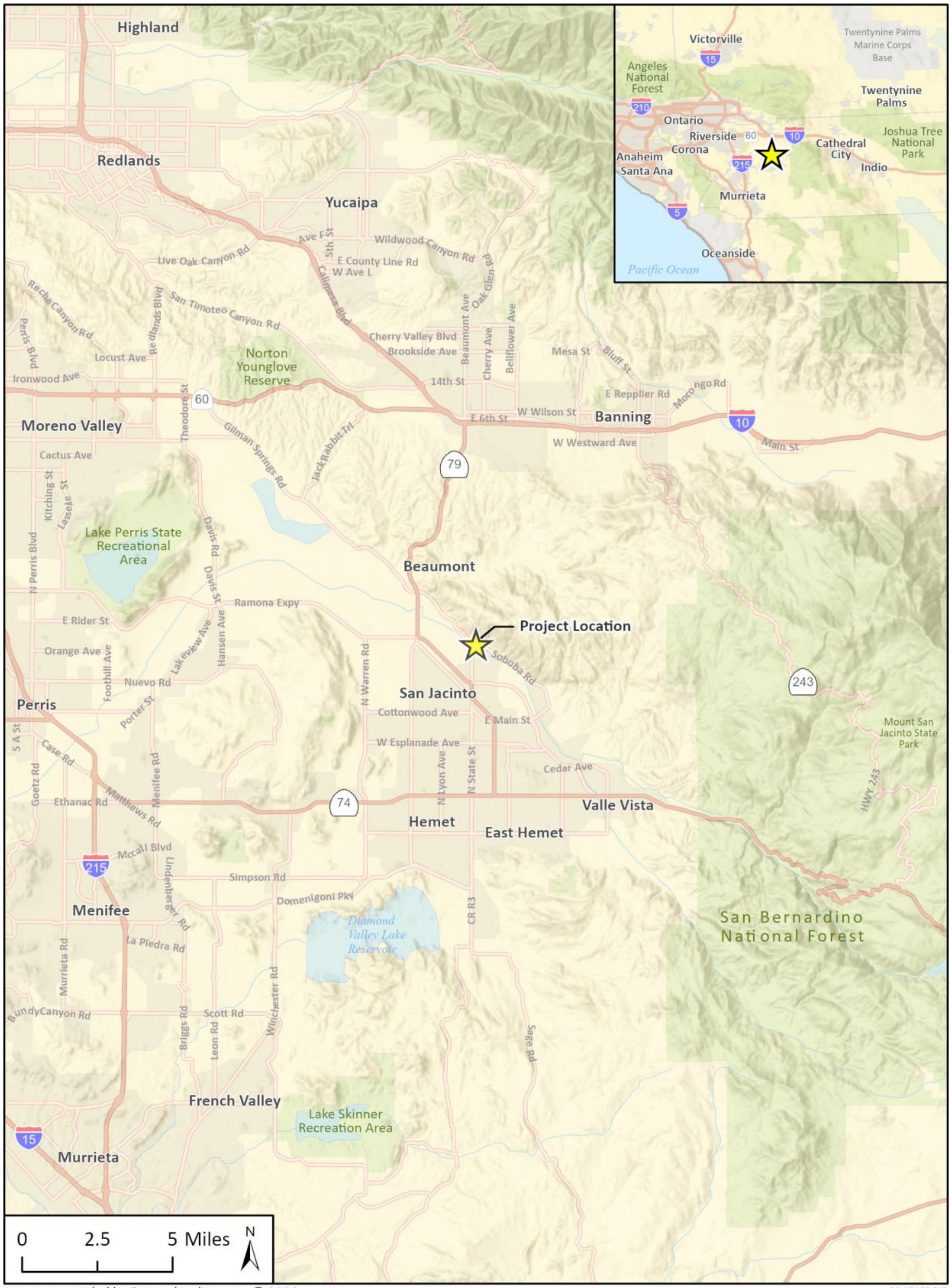

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Fig 1 Regional Location

Figure 2 Study Area

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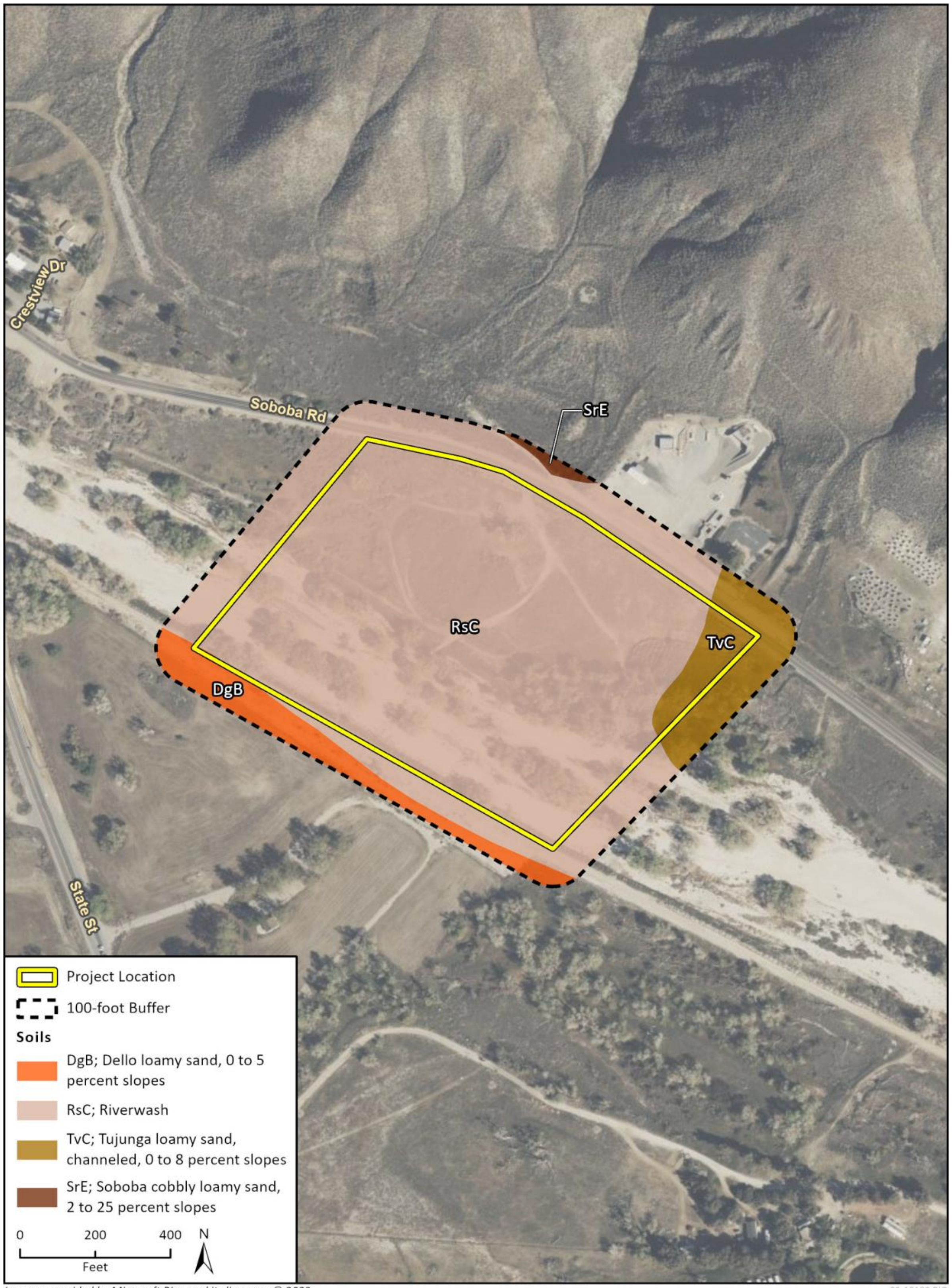
Fig X Project Location

Figure 3 Soils



Imagery provided by Microsoft Bing and its licensors © 2023.
Additional data provided by Natural Resource Conservation Service Soil Survey Geography, 2023.

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Fig 3 USGS NRCS Soils Map

Figure 4 Vegetation Communities

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Fig X Vegetation

Figure 5 Jurisdictional Delineation

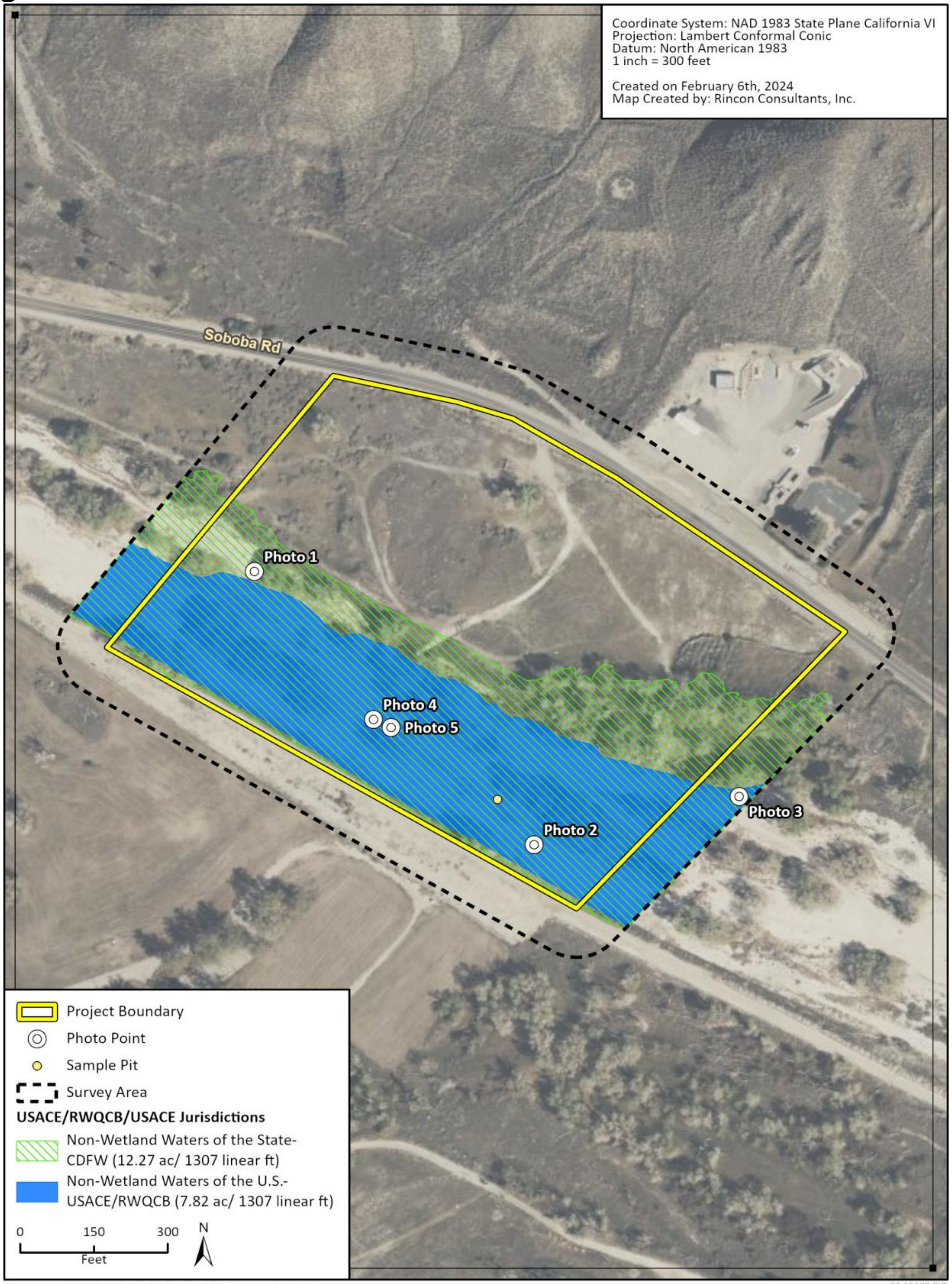

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Fig X Jurisdictional Delineation

Attachment 2

Representative Site Photographs

Photograph 1. Northwest facing photograph showing the OHWM and CDFW jurisdiction. January 8, 2024.

Photograph 2. Northwest facing photograph showing the OHWM and riparian canopy. January 8, 2024.

Photograph 3. North facing photograph at the upstream portion of the Study Area. January 8, 2024.

Photograph 4. North facing photograph showing San Jacinto River wash and cottonwood woodland. January 8, 2024.

Photograph 5. Southeast facing showing San Jacinto River overview with riparian canopy. January 8, 2024.

Attachment 3

Data Forms

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Casa Loma Siphon No. 1 Project City/County: San Jacinto Sampling Date: 1/8/2024

Applicant/Owner: The Metropolitan Water District State: CA Sampling Point: 1

Investigator(s): K. Gugerty, J. Reed Section, Township, Range: S: 00, T: 4 S, R: 1 W, San Bernardino Principal Meridian

Landform (hillslope, terrace, etc.): channel Local relief (concave, convex, none): concave Slope (%): 2-9

Subregion (LRR): Arid West Lat: 33.819675, Long: -116.969608 Datum: NAD 83

Soil Map Unit Name: Riverwash NWI classification: RIverine

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ___ (If no, explain in Remarks.)

Are Vegetation ___, Soil ___, or Hydrology ___ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ___

Are Vegetation ___, Soil ___, or Hydrology ___ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

	Yes	No
Hydrophytic Vegetation Present?		✓
Hydric Soil Present?		✓
Wetland Hydrology Present?	✓	
Is the Sampled Area within a Wetland?		✓

Remarks:
Not a wetland

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 20x20)			
1. Populus fremontii	25	D	FAC
2.			
3.			
4.			
	25 = Total Cover		
Sapling/Shrub Stratum (Plot size: 10x10)			
1. Ambrosia acanthicarpa	5	D	NL
2.			
3.			
4.			
5.			
	5 = Total Cover		
Herb Stratum (Plot size: ___)			
1. None			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	0 = Total Cover		
Woody Vine Stratum (Plot size: ___)			
1. None			
2.			
	0 = Total Cover		

% Bare Ground in Herb Stratum 100 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species		x 1 =
FACW species		x 2 =
FAC species		x 3 =
FACU species		x 4 =
UPL species		x 5 =
Column Totals:	(A)	(B)

Prevalence Index = B/A = ___

Hydrophytic Vegetation Indicators:

- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ___ No ✓

Remarks:

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
0-23	10YR 6/2	100	---------------	----	----	----	Sand	Uniform Sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ______

Depth (inches): ______

Hydric Soil Present? Yes ___ No ✓

Remarks:

no hydric soil indicators present.
Uniform sandy substrate

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ✓ Sediment Deposits (B2) (**Riverine**)
- ✓ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ______

Water Table Present? Yes ___ No ✓ Depth (inches): ______

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ______

Wetland Hydrology Present? Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No primary indicators present. Two secondary indicators present.

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Casa Loma Siphon No.1 **Project Number:** 23-15199 **Stream:** San Jacinto River **Investigator(s):** K. Gugerty, J. Reed	**Date:** 1/8/2024 **Time:** 1040 **Town:** San Jacinto **State:** CA **Photo begin file#:** **Photo end file#:**
Y ☒ / N ☐ Do normal circumstances exist on the site? Y ☐ / N ☒ Is the site significantly disturbed?	**Location Details:** Within San Jacinto River **Projection:** USGS **Datum:** NAD 83 **Coordinates:**

Potential anthropogenic influences on the channel system:

Access roads leading into the channel on NE bank. Man made berms on both side of river with rip rap enforced banks on the SE.
Pipeline buried within channel from the NE to the SE.

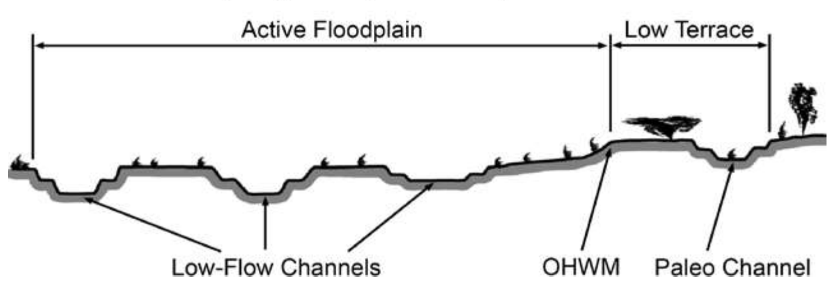
Brief site description:

Sandy substrate within fremont cottonwood woodland. Narrowleaf willow, salt cedar and ruderal vegetation (mustard and thistle). Banks are reinforced/ man made.

Checklist of resources (if available):

- ☒ Aerial photography
  Dates:
- ☐ Topographic maps
- ☐ Geologic maps
- ☐ Vegetation maps
- ☐ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ☐ Global positioning system (GPS)
- ☐ Other studies
- ☐ Stream gage data
  Gage number:
  Period of record:
  - ☐ History of recent effective discharges
  - ☐ Results of flood frequency analysis
  - ☐ Most recent shift-adjusted rating
  - ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

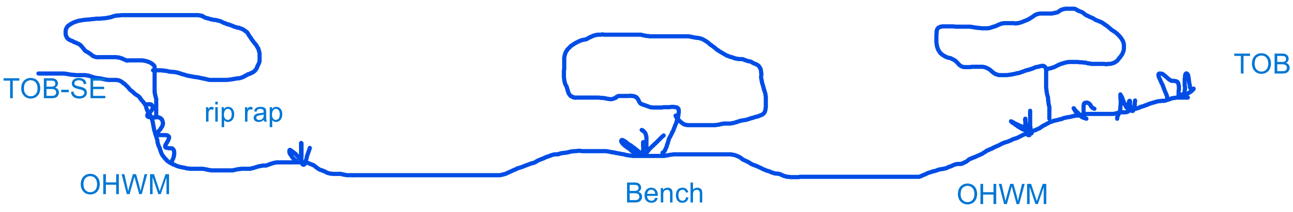


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☐ Mapping on aerial photograph
   - ☐ GPS
   - ☐ Digitized on computer
   - ☐ Other:

Project ID: 23-15199 **Cross section ID:** SP-01 **Date:** 1/8/2024 **Time:** 1040

Cross section drawing:



OHWM

GPS point: 33.818606, -116.967588

Indicators:

- [x] Change in average sediment texture
- [ ] Change in vegetation species
- [x] Change in vegetation cover
- [x] Break in bank slope
- [ ] Other: ______
- [ ] Other: ______

Comments:
Defined by man-made berm with break in slope.

Floodplain unit:

- [x] Low-Flow Channel
- [ ] Active Floodplain
- [ ] Low Terrace

GPS point: 33.820176, -116.967813

Characteristics of the floodplain unit:

Average sediment texture: Sand

Total veg cover: 65 % Tree: 50 % Shrub: 10 % Herb: 5 %

Community successional stage:

- [ ] NA
- [ ] Early (herbaceous & seedlings)
- [ ] Mid (herbaceous, shrubs, saplings)
- [x] Late (herbaceous, shrubs, mature trees)

Indicators:

- [ ] Mudcracks
- [ ] Ripples
- [x] Drift and/or debris
- [x] Presence of bed and bank
- [x] Benches
- [ ] Soil development
- [ ] Surface relief
- [ ] Other: ______
- [ ] Other: ______
- [ ] Other: ______

Comments:

Attachment 4

Regulatory Framework

Regulatory Framework

The following is a brief summary of the regulatory context under which biological resources are managed at the federal, State, and local levels. A number of federal and State statutes provide a regulatory structure which guide the protection of jurisdictional features. Agencies with the responsibility for protection of jurisdictional features within the Project site include:

- United States Army Corps of Engineers (non-wetland waters and wetlands of the United States)
- Regional Water Quality Control Board (waters of the State)
- California Department Fish and Wildlife (riparian areas, streambeds, and lakes)

United States Army Corps of Engineers Jurisdiction

The United States Army Corps of Engineers (USACE) is responsible for administering several federal programs related to ensuring the quality and navigability of the nation's waters.

Clean Water Act Section 404

Congress enacted the Clean Water Act (CWA) "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Section 404 of the CWA authorizes the Secretary of the Army, acting through the USACE, to issue permits regulating the discharge of dredged or fill materials into the "navigable waters at specified disposal sites."

Section 502 of the CWA further defines "navigable waters" as "waters of the United States, including the territorial seas." "Waters of the United States" are broadly defined at 33 CFR Part 328.3 to include navigable waters, perennial and intermittent streams, lakes, rivers, ponds, as well as wetlands, marshes, and wet meadows. In recent years the USACE and US Environmental Protection Agency (USEPA) have undertaken several efforts to modernize their regulations defining "waters of the United States" (e.g., the 2015 Clean Water Rule and 2020 Navigable Waters Protection Rule), but these efforts have been frustrated by legal challenges which have invalidated the updated regulations. Thus, the agencies' longstanding definition of "waters of the United States," which dates from 1986, remains in effect albeit with supplemental guidance interpreting applicable court decisions as described below.

Waters of the U.S.

In summary, USACE and USEPA regulations define "waters of the United States" as follows:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
    i. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
    ii. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    iii. Which are used or could be used for industrial purpose by industries in interstate commerce;

4. All impoundments of waters otherwise defined as waters of the United States;
5. Tributaries of waters identified in paragraphs (a)(1)-(4) of this section;
6. The territorial sea;
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in items 1-6 above.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with the USEPA.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA are not waters of the United States.

The lateral limits of USACE jurisdiction in non-tidal waters is defined by the "ordinary high-water mark" (OHWM) unless adjacent wetlands are present. The OHWM is a line on the shore or edge of a channel established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed upon the bank, shelving, changes in the character of soil, destruction of vegetation, or the presence of debris (33 CFR 328.3(e)). As such, waters are recognized in the field by the presence of a defined watercourse with appropriate physical and topographic features. If wetlands occur within, or adjacent to, waters of the United States, the lateral limits of USACE jurisdiction extend beyond the OHWM to the outer edge of the wetlands (33 CFR 328.4 (c)). The upstream limit of jurisdiction in the absence of adjacent wetlands is the point beyond which the OHWM is no longer perceptible (33 CFR 328.4; see also 51 FR 41217).

Wetlands

The USACE defines wetlands as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3). The USACE's delineation procedures identify wetlands in the field based on indicators of three wetland parameters: hydrophytic vegetation, hydric soils, and wetland hydrology. The following is a discussion of each of these parameters.

Hydrophytic Vegetation

Hydrophytic vegetation dominates areas where frequency and duration of inundation or soil saturation exerts a controlling influence on the plant species present. Plant species are assigned wetland indicator status according to the probability of their occurring in wetlands. More than fifty percent of the dominant plant species must have a wetland indicator status to meet the hydrophytic vegetation criterion. The USACE published the National Wetland Plant List (USACE 2018), which separates vascular plants into the following four basic categories based on plant species frequency of occurrence in wetlands:

- **Obligate Wetland (OBL).** Almost always occur in wetlands
- **Facultative Wetland (FACW).** Usually occur in wetlands, but occasionally found in non-wetlands
- **Facultative (FAC).** Occur in wetlands or non-wetlands
- **Facultative Upland (FACU).** Usually occur in non-wetlands, but may occur in wetlands
- **Obligate Upland (UPL).** Almost never occur in wetlands

The USACE considers OBL, FACW and FAC species to be indicators of wetlands. An area is considered to have hydrophytic vegetation when greater than 50 percent of the dominant species in each vegetative stratum (tree, shrub, and herb) fall within these categories. Any species not appearing on the United States Fish and Wildlife Service's list is assumed to be an upland species, almost never occurring in wetlands. In addition, an area needs to contain at least 5% vegetative cover to be considered as a vegetated wetland.

Hydric Soils

Hydric soils are saturated or inundated for a sufficient duration during the growing season to develop anaerobic or reducing conditions that favor the growth and regeneration of hydrophytic vegetation. Field indicators of wetland soils include observations of ponding, inundation, saturation, dark (low chroma) soil colors, bright mottles (concentrations of oxidized minerals such as iron), gleying (indicates reducing conditions by a blue-grey color), or accumulation of organic material. Additional supporting information includes documentation of soil as hydric or reference to wet conditions in the local soils survey, both of which must be verified in the field.

Wetland Hydrology

Wetland hydrology is inundation or soil saturation with a frequency and duration long enough to cause the development of hydric soils and plant communities dominated by hydrophytic vegetation. If direct observation of wetland hydrology is not possible (as in seasonal wetlands), or records of wetland hydrology are not available (such as stream gauges), assessment of wetland hydrology is frequently supported by field indicators, such as water marks, drift lines, sediment deposits, or drainage patterns in wetlands.

Limitations on Jurisdiction based on Sackett v. USEPA Supreme Court

On May 25, 2023, the Supreme Court issued its decision on the petition from the Sacketts, a family in Idaho that was subject to a compliance order from the USEPA for backfilling their lot near Priest Lake, which the USEPA claimed contained federally regulated wetlands. The wetlands in question were adjacent to a ditch that fed a creek that ultimately drained into Priest Lake, a navigable water body. The USEPA asserted that the Sacketts had violated the law by filling the wetlands on their property without a permit. The Court's decision addressed controversy over whether, and under what conditions, the CWA reaches navigable waters' tributaries or adjacent wetlands. The Supreme Court's decision in Sackett provides definitive guidance to the agencies in determining the limits of their Clean Water Act authority. Major tenets of the decision have been incorporated into the agencies' current regulations through the September 2023 Conforming Rule.

The Court decided:

- "Adjacent wetlands" are WOTUS only if there is a continuous surface connection between the wetland and a navigable or relatively permanent water body, such that it is difficult to determine the boundary between the wetland and the water body. The opinion notes that "temporary interruptions to surface connection may sometimes occur because of phenomena like low tides or dry spells." The agencies addressed this element by defining the term "adjacent" to mean "having a continuous surface connection" in the Conforming Rule.
- The Significant Nexus Standard, introduced by the Court in prior decisions, is not mentioned in the Clean Water Act and should not be used. The Court determined that the standard applies ecological factors whose use in determining jurisdiction is not supported by the statute. The Conforming Rule removed significant nexus considerations from the definition.
- Although jurisdiction over tributaries was not addressed by the Court, the decision stated that "…the [Clean Water Act's] use of "waters" encompasses only those relatively permanent, standing or continuously flowing bodies of water forming geographical features that are

described in ordinary parlance as streams, oceans, rivers, and lakes." The Conforming Rule makes clear that only relatively permanent tributaries qualify as "waters of the United States."

Rivers and Harbors Act Section 10

Section 10 of the Rivers and Harbors Act of 1899 requires authorization from the USACE for the construction of any structure in or over any navigable water of the United States. Structures or work outside the limits defined for navigable waters of the United States require a Section 10 permit if the structure or work affects the course, location, or condition of the water body. The law applies to any dredging or disposal of dredged materials, excavation, filling, re-channelization, or any other modification of a navigable water of the United States, and applies to all structures and work. It further includes, without limitation, any wharf, dolphin, weir, boom breakwater, jetty, groin, bank protection (e.g., riprap, revetment, bulkhead), mooring structures such as pilings, aerial or subaqueous power transmission lines, intake or outfall pipes, permanently moored floating vessel, tunnel, artificial canal, boat ramp, aids to navigation, and any other permanent, or semi-permanent obstacle or obstruction. It is important to note that Section 10 applies only to navigable waters, and thus does not apply to work in non-navigable wetlands or tributaries. In some cases, Section 10 authorization is issued by the USACE concurrently with CWA Section 404 authorization, such as when certain Nationwide Permits are used.

Regional Water Quality Control Board Jurisdiction

The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) have jurisdiction over "waters of the State," which are defined as any surface water or groundwater, including saline waters, within the boundaries of the state (California Water Code sec. 13050(e)). These agencies also have responsibilities for administering portions of the CWA.

Clean Water Act Section 401

Section 401 of the CWA requires an applicant requesting a federal license or permit for an activity that may result in any discharge into navigable waters (such as a Section 404 Permit) to provide state certification that the proposed activity will not violate state and federal water quality standards. In California, CWA Section 401 Water Quality Certification (Section 401 Certification) is issued by the RWQCBs and by the SWRCB for multi-region projects. The process begins when an applicant submits an application to the RWQCB and informs the USACE (or the applicable agency from which a license or permit was requested) that an application has been submitted. The USACE will then determine a "reasonable period of time" for the RWQCB to act on the application; this is typically 60 days for routine projects and longer for complex projects but may not exceed one year. When the period has elapsed, if the RWQCB has not either issued or denied the application for Section 401 Certification, the USACE may determine that Certification has been waived and issue the requested permit. If a Section 401 Certification is issued it may include binding conditions, imposed either through the Certification itself or through the requested federal license or permit.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code section 13000 et seq.), the policy of the State is as follows:

- The quality of all the waters of the State shall be protected
- All activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason
- The State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation

The Porter-Cologne Act established nine RWQCBs (based on watershed boundaries) and the SWRCB, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The SWRCB provides program guidance and oversight, allocates funds, and reviews RWQCB decisions. In addition, the SWRCB allocates rights to the use of surface water. The RWQCBs have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions. The SWRCB and RWQCBs have numerous nonpoint source related responsibilities, including monitoring and assessment, planning, financial assistance, and management.

Section 13260 of the Porter-Cologne Act requires any person discharging or proposing to discharge waste that could affect the quality of waters of the State to file a Report of Waste Discharge with the appropriate RWQCB. The RWQCB may then authorize the discharge, subject to conditions, by issuing Waste Discharge Requirements (WDRs). While this requirement was historically applied primarily to outfalls and similar point source discharges, the SWRCB's *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*, effective May 2020, make it clear that the agency will apply the Porter-Cologne Act's requirements to discharges of dredge and fill material as well. The *Procedures* state that they are to be used in issuing CWA Section 401 Certifications and WDRs, and largely mirror the existing review requirements for CWA Section 404 Permits and Section 401 Certifications, incorporating most elements of the USEPA's *Section 404(b)(1) Guidelines*. Following issuance of the *Procedures*, the SWRCB produced a consolidated application form for dredge/fill discharges that can be used to obtain a CWA Section 401 Water Quality Certification, WDRs, or both.

Non-Wetland Waters of the State

The SWRCB and RWQCBs have not established regulations for field determinations of waters of the state except for wetlands currently. In many cases the RWQCBs interpret the limits of waters of the State to be bounded by the OHWM unless isolated conditions or ephemeral waters are present. However, in the absence of statewide guidance each RWQCB may interpret jurisdictional boundaries within their region and the SWRCB has encouraged applicants to confirm jurisdictional limits with their RWQCB before submitting applications. As determined by the RWQCB, waters of the State may include riparian areas or other locations outside the OHWM, leading to a larger jurisdictional area over a given water body compared to the USACE.

Wetland Waters of the State

Procedures for defining wetland waters of the State pursuant to the SWRCB's *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* went into effect May 28, 2020. The SWRCB defines an area as wetland if, under normal circumstances:

(i) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both;

(ii) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and

(iii) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

The SWRCB's Implementation Guidance for the Wetland Definition and Procedures for Discharges of Dredge and Fill Material to Waters of the State (2020), states that waters of the U.S. and waters of the State should be delineated using the standard USACE delineation procedures, taking into consideration that the methods shall be modified only to allow for the fact that a lack of vegetation does not preclude an area from meeting the definition of a wetland.

California Department of Fish and Wildlife Jurisdiction

California Fish and Game Code section 1602 states that it is unlawful for any person to "substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake" without first notifying the California Department of Fish and Wildlife (CDFW) of that activity. Thereafter, if CDFW determines and informs the entity that the activity will not substantially adversely affect any existing fish or wildlife resources, the entity may commence the activity. If, however, CDFG determines that the activity may substantially adversely affect an existing fish or wildlife resource, the entity may be required to obtain from CDFW a Streambed Alteration Agreement (SAA), which will include reasonable measures necessary to protect the affected resource(s), before the entity may conduct the activity described in the notification. Upon receiving a complete Notification of Lake/Streambed Alteration, CDFW has 60 days to present the entity with a Draft SAA. Upon review of the Draft SAA by the applicant, any problematic terms are negotiated with CDFW and a final SAA is executed.

The CDFW has not defined the term "stream" for the purposes of implementing its regulatory program under Section 1602, and the agency has not promulgated regulations directing how jurisdictional streambeds may be identified, or how their limits should be delineated. However, four relevant sources of information offer insight as to the appropriate limits of CDFW jurisdiction as discussed below.

- **The plain language of Section 1602 of CFGC** establishes the following general concepts:
  - References "river," "stream," and "lake"
  - References "natural flow"
  - References "bed," "bank," and "channel"

- **Applicable court decisions,** in particular *Rutherford v. State of California* (188 Cal App. 3d 1276 (1987), which interpreted Section 1602's use of "stream" to be as defined in common law. The Court indicated that a "stream" is commonly understood to:
  - Have a source and a terminus
  - Have banks and a channel
  - Convey flow at least periodically, but need not flow continuously and may at times appear outwardly dry
  - Represent the depression between the banks worn by the regular and usual flow of the water
  - Include the area between the opposing banks measured from the foot of the banks from the top of the water at its ordinary stage, including intervening sand bars
  - Include the land that is covered by the water in its ordinary low stage
  - Include lands below the OHWM

- **CDFW regulations** defining "stream" for other purposes, including sport fishing (14 CCR 1.72) and streambed alterations associated with cannabis production (14 CCR 722(c)(21)), which indicate that a stream:
  - Flows at least periodically or intermittently

- Flows through a bed or channel having banks
- Supports fish or aquatic life
- Can be dry for a period of time
- Includes watercourses where surface or subsurface flow supports or has supported riparian vegetation

- **Guidance documents,** including A Field Guide to Lake and Streambed Alteration Agreements (CDFG 1994) and Methods to Describe and Delineate Episodic Stream Processes on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg 2013), which suggest the following:
  - A stream may flow perennially or episodically
  - A stream is defined by the course in which water currently flows, or has flowed during the historic hydrologic course regime (approximately the last 200 years)
  - Width of a stream course can reasonably be identified by physical or biological indicators
  - A stream may have one or more channels (single thread vs. compound form)
  - Features such as braided channels, low-flow channels, active channels, banks associated with secondary channels, floodplains, islands, and stream-associated vegetation, are interconnected parts of the watercourse
  - Canals, aqueducts, irrigation ditches, and other means of water conveyance can be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife
  - Biologic components of a stream may include aquatic and riparian vegetation, all aquatic animals including fish, amphibians, reptiles, invertebrates, and terrestrial species which derive benefits from the stream system
  - The lateral extent of a stream can be measured in different ways depending on the particular situation and the type of fish or wildlife resource at risk

The tenets listed above, among others, are applied to establish the boundaries of streambeds in various environments. Importance of each factor may be weighted based on site-specific considerations and the applicability of the indicators to the streambed at hand.