



March 21, 2022  
(2020-028.02)

Phil Krause  
County of San Bernardino  
Department of Public Works, Special Districts  
222 W. Hospitality Lane  
San Bernardino, CA 92415  
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**RE: Aquatic Resources Delineation for a 1.62-Acre Parcel (APN 0357-621-65) being proposed for the CSA 70J Reservoir 3A 2-million-gallon (MG) Water Tank Expansion Project located in San Bernardino County, California**

Dear Mr. Krause:

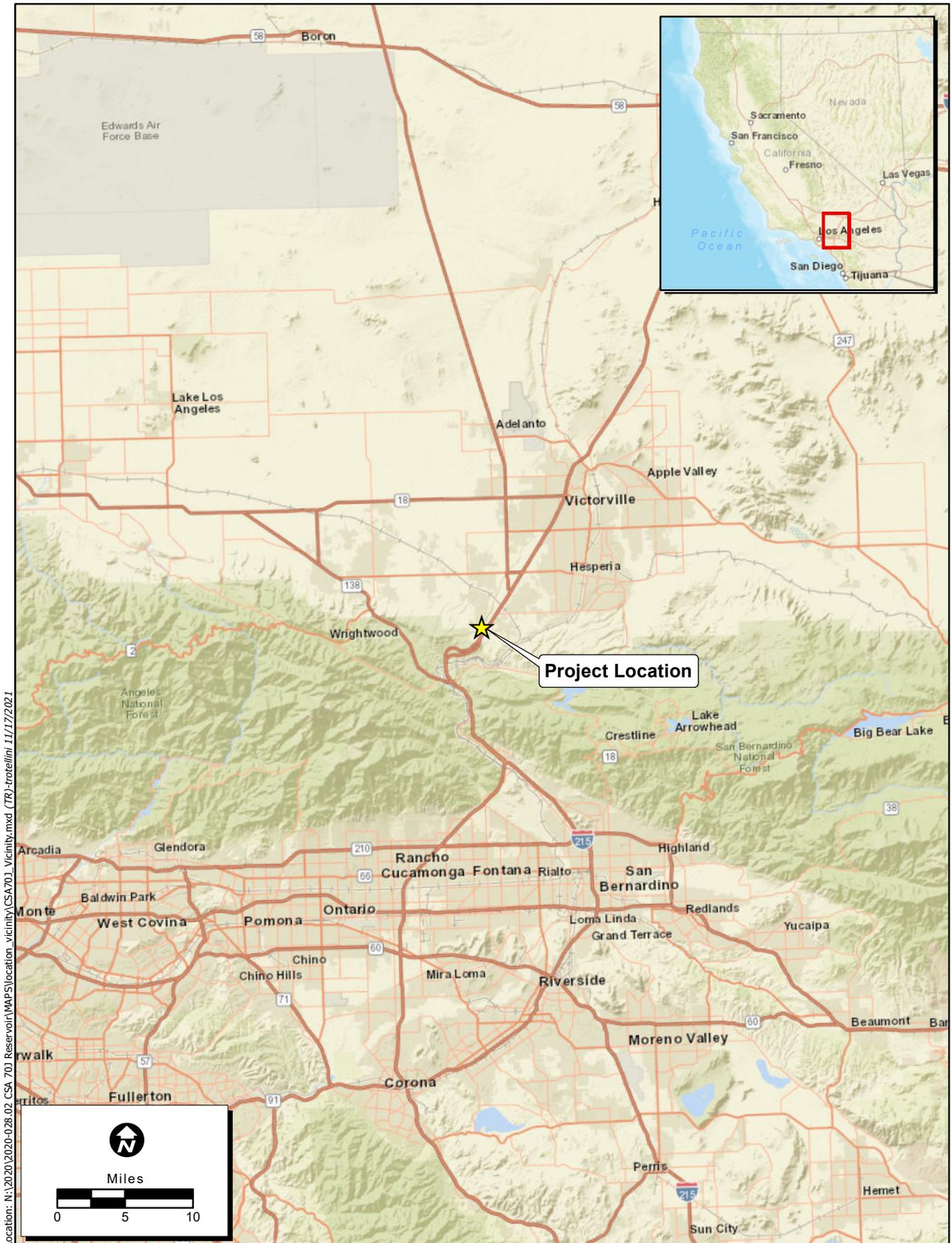
This letter provides the results of a jurisdictional delineation of an approximately 1.62-acre parcel (APN 0357-621-65) (Project) located in unincorporated land adjacent to Hesperia city limits within San Bernardino County, California.

This report describes potential waters of the U.S. identified within the site that may be regulated by the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the federal Clean Water Act (CWA) for a Delineation Area (DA) consisting of the entire parcel. The potential Waters of the U.S. boundaries depicted in this report represent a calculated estimation of the jurisdictional area within the DA. This report also provides information pertinent to jurisdiction of the California Department of Fish and Wildlife (CDFW) and Regional Water Quality Control Board (RWQCB). See Attachment A for further details concerning the regulatory framework.

## **PROJECT LOCATION AND DESCRIPTION**

The Project site consists of a 1.62-acre parcel of land (APN 0357-621-65) located in unincorporated land adjacent to Hesperia city limits, west of Oak Hill Road, east of Columbine Road, and south of Jenny Street (Figure 2. Project Location). There is an existing reservoir located on the parcel, along with dirt roads and partially paved roads. It is depicted on the U.S. Geological Survey (USGS) 7.5-minute Cajon, California (1996) topographic quadrangle map, the Project site is located in Section 6 of Township 3 North, Range 5 West, of the San Bernardino Base and Meridian (SBBM) (Figure 1. Project Vicinity).

The Project would construct a new 2-million-gallon water reservoir, new 16-foot-wide access roads, a retaining wall, a small maintenance structure and a retention basin below the tank location. The impact area analyzed for the Project consists of all proposed permanent and temporary impacts associated with construction.



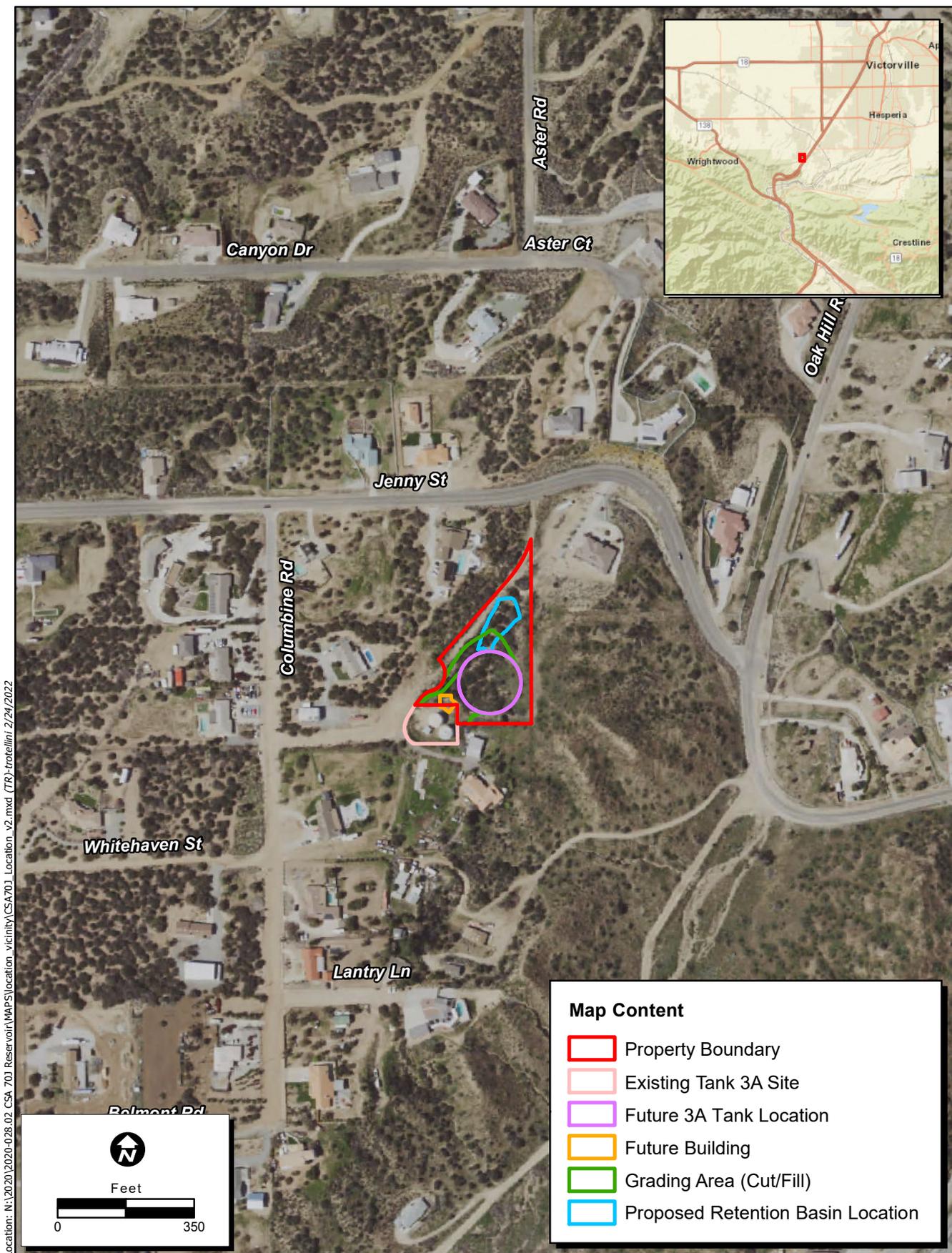
Location: N:\2020\2020-028.02 CSA 70J Reservoir\MAPS\location\_vicinity\CSA70J\_Vicinity.mxd (TR) - brostellini 11/17/2021

Map Date: 11/17/2021  
 Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



**Figure 1. Project Vicinity**

2020-028.02 CSA 70J Reservoir



**Figure 2. Project Location**

2020-028.02 CSA 70J Reservoir

## METHODS

This jurisdictional delineation was conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Arid West Region Supplement) (USACE 2008a). The boundaries of potential Waters of the U.S. and the State were delineated through aerial photograph interpretation and standard field methods. A color aerial photograph (1"=60' scale, NAIP 2020) was used to assist with mapping and ground-truthing. The Jepson Manual, 2nd Edition (Baldwin et al. 2012) was used for plant nomenclature and identification. *Munsell Soil Color Charts* (Munsell Color 2009) and the Web Soil Survey (NRCS 2021a) were used to aid in identifying hydric soils in the field.

The field survey was conducted on February 11, 2022, by ECORP biologist Scott Taylor with assistance from Chelsie Brown. The biologists walked accessible areas of the DA to determine the location and extent of aquatic resources. Aquatic resources within the site were documented electronically using a global positioning system (GPS) device with sub-centimeter accuracy. The total linear feet and area of the jurisdictional waters within the DA were recorded. Characteristics of mapped features were also documented in photographs.

For the USACE, boundaries were identified according to indicators of Ordinary High-Water Mark (OHWM) commonly found in the Arid West which include a clear natural scour line impressed on the bank, recent bank erosion, destruction of native terrestrial vegetation, and the present of litter and debris. Field identification of the OHWM includes noting general impression of the vegetation species and distribution, geomorphic features present, surrounding upland land use, and hydrologic alterations and instream and floodplain structures. In the field, the process of delineating the OHWM included the identification of a low-flow channel (if present), a transition to an active floodplain, and an active floodplain through the presence of geomorphic features (e.g., presence of an active floodplain, benches, break in bank slope, staining of rocks, litter, or drift) and vegetation indicators (e.g., presence of sparse/low vegetation, annual herbs, hydromesic ruderals, pioneer tree seedlings and saplings, xeroriparian species).

Where wetlands were suspected, paired sample point locations were sampled to evaluate whether or not the vegetation, hydrology, and soils data supported an aquatic resource determination. At each paired location, one point was located such that it was within the estimated aquatic resource area, and the other point was situated outside the limits of the estimated aquatic resource area. An additional non-paired location was sampled to document a marginal area that was determined to be upland as it lacked hydrophytic vegetation, hydric soils, and/or wetland hydrology.

Jurisdiction of the Regional Water Quality Control Board (RWQCB) was identified using methods and definitions found within the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures) (California Code of Regulations [CCR], title 23, §

3855) (State Water Resources Control Board [SWRCB] 2021). According to this reference, *Waters of the State* is defined as any surface water or groundwater, including saline waters, within the boundaries of the State (California Water Code § 13050[e]).

CDFW jurisdictional limits were mapped based on common practice and experience through Notification processes with the CDFW. There is no standard methodology for delineating CDFW jurisdiction. Within Title 14, California Code of Regulations, Section 1.72 a stream is defined as "For CDFW jurisdiction, the trees were mapped which could be considered as *"a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation."* The CDFW determines what constitutes a stream or its associated vegetation. Generally, the limits of CDFW streambeds are defined for this delineation as the limits from top-of-bank to top-of-bank and associated vegetation associated with streambeds that typically includes riparian shrubs and trees.

This study encompasses the work limits for the Project and the associated parcel. All areas of the DA were accessible during the survey. The survey was conducted in winter, prior to the blooming period for many plant species. For this reason, some annual herbaceous species (including some wetland species, potentially) that could occur would not have been observed at the time of the survey. However, no suspected wetlands were observed or expected within the DA.

## RESULTS

### ENVIRONMENTAL SETTING

The DA is located within moderately to gently-sloping terrain and is primarily composed of mostly undisturbed land within private property. A topographic low point is present in the middle of the DA with the property sloping downward to the west along the eastern boundary and downward to the east along the western boundary. The Project site is undeveloped and the boundary at the southwest corner of the property is made up of a fence line for an existing water tank facility. Tucker oak-chaparral shrubland alliance-chamise association was observed as the primary vegetation community on the property with a small portion of the property's eastern edge consisting of disturbed Tucker oak chaparral-chamise.

The areas surrounding the parcel consist of the existing reservoir facility to the southwest and rural residential development. To the east of the Project site there is open land. Directly south of the Project site is an existing San Bernardino County water tank facility and a residence. The northern and western boundaries of the Project site are surrounded by residential housing. The elevation within the DA ranges from approximately 4,022 feet (1,226 meters) to 4,060 feet (1,237 meters) above mean sea level (amsl).

According to the Web Soil Survey (NRCS 2021), two soil units, or types, have been mapped within the DA. Soils within the DA consist primarily of Wrightwood-Bull Trail Association, Sloping with a small amount of Bull Trail-Typic Xerorthents Association, Moderately Steep. Neither of these soil types is considered a hydric soil and both types are derived from alluvium with sandy loam or loamy sand on the surface layer.

The National Wetland Inventory and USGS mapping for the DA identifies no features (blue line streams, and so on) present.

### AQUATIC RESOURCES

There are four mapped features within the DA (Features 1-4), all of which are fairly small and narrow (Figure 3. Aquatic Resources Delineation). There are no suspected wetlands present. Features 1, 2 and 3 are considered to be ephemeral drainages while Feature 4 is considered to be a roadside ditch. All of the mapped features flow together and exit the DA along the northeast boundary. These features are described in further detail below. Representative photographs of the site are included in Attachment A and a list of plant species observed on-site is included in Attachment B. A discussion of the waters is presented below and a jurisdictional delineation map is presented as Figure 3. *Aquatic Resources Delineation.*

### Potential Waters of the U.S.

A total of 0.022 acre and 361.7 linear feet of ephemeral drainage and roadside ditch have been mapped within the DA (Table 1) within the four mapped features. Of these, none are within the Project impact area.

<b>Table 1. Potential Waters of the U.S.</b>		
<b>Type</b>	<b>Acreage/Linear Feet<sup>1</sup> within DA</b>	<b>Acreage/Linear Feet<sup>1</sup> within Impact Area</b>
Wetlands	0	0
Other Waters (Jurisdictional)		
<i>Ephemeral Drainage (Features 1-3)</i>	0.007/138.5	0
<i>Roadside Ditch (Feature 4)</i>	0.015/223.2	0
<b>Total</b>	<b>0.022/361.7</b>	<b>0</b>

<sup>1</sup>Acreages represent a calculated estimation and are subject to modification following the USACE verification process.

### Wetlands

There were no suspected wetlands found within the DA.

**Figure 3. Aquatic Resources Delineation**

**Map Content**

-  Property Boundary
-  Existing Tank 3A Site
-  Proposed Project Impact Area
- Ephemeral Drainage**
-  OHWM
-  Top of Bank
- Roadside Ditch**
-  OHWM
-  Top of Bank



Location: N:\2020\2020-028.02 CSA 70J Reservoir\WAP\jurisdictional\_delineation\CSA70J\_ARO.mxd (TR)-trattelli 3/21/2022



## **Other Waters of the U.S.**

### **Ephemeral Drainage**

Ephemeral drainages are linear features that exhibit a bed and bank and an OHWM. These features typically convey runoff for short periods of time, during and immediately following rain events, and are not influenced by groundwater sources at any time during the year. Three mapped jurisdictional features (Features 1, 2 and 3 as shown on Figure 3) are categorized as ephemeral drainages and are present within the DA: Features 1 and 2 are present along the northern boundary of the DA and Feature 3 is present along the eastern boundary. A total of 0.007 acre of ephemeral drainages measuring 138.5 feet in length was mapped within the DA across the three features.

Soils within the ephemeral drainages consisted of sandy loam with variable amounts of sand, gravel and small cobbles with some amount of organic matter as well. The soils observed in the field were consistent with those mapped by the NRCS for the area. None of the ephemeral features appeared, based on surface soil characteristics, to support any wetland characteristics. Wetland hydrology indicators observed within the ephemeral drainages included sediment deposits (B2) (riverine). Wetland hydrology indicators were not observed in the upland areas adjacent to the drainage features. The boundaries of the ephemeral drainages were mapped at the OHWM defined by bed and bank.

### **Roadside Ditch**

Roadside ditches are linear features associated with the hard-packed surface of a roadway and are caused by headward erosion that creates a small erosional gully over time. Although these types of features can exhibit a bed and bank and an OHWM, they are not typically considered to be jurisdictional unless associated with a relocated natural stream course. The identified roadside ditch (Feature 4) was formed by water sheet flow off of a compacted area adjacent to the existing reservoir. A total of 0.015 acre of roadside ditch measuring 223.2 feet in length was mapped within the DA.

### **Potential CDFW Jurisdiction**

A total of 0.026 acre of potential CDFW jurisdiction has been mapped within the DA (Table 2) including Features 1-4, all of which are considered to be unvegetated streambeds. No riparian vegetation was present within the DA. Vegetation within the upland habitats on-site is mainly dominated by Tucker oak (*Quercus john-tuckeri*) and with additional native shrubs present including rabbitbrush (*Ericameria nauseosa*) and goldenbush (*Isocoma* sp.). The mapped limits of CDFW jurisdiction were assessed to be equivalent to those mapped as Waters of the U.S.

<b>Table 2. Potential CDFW Jurisdiction</b>		
<b>Type</b>	<b>Acreage<sup>1</sup> within DA</b>	<b>Acreage<sup>1</sup> within Impact Area</b>
Streambed		
<i>Ephemeral Drainage (Features 1-3)</i>	0.011	0
<i>Roadside Ditch (Feature 4)</i>	0.015	0
<b>Total</b>	<b>0.026</b>	<b>0</b>

## JURISDICTIONAL ASSESSMENT

Of the aquatic resources identified in the DA, the following features are likely regulated by USACE:

- Features 1, 2 and 3

Characteristics observed for each of these features meet the definition of WOTUS because they connect to a TNW (the Mojave River). The USACE generally considers the Mojave River to be jurisdictional due to having some navigable, perennial portions along its length.

Approved Jurisdictional Determinations (AJDs) and Preliminary Jurisdictional Determinations (PJDs) are tools used by the USACE to help implement Section 404 of the CWA and Section 10 of the Rivers and Harbors Act of 1899. As per Regulatory Guidance Letter 16-01, an applicant may request a PJD

“in order to move ahead expeditiously to obtain a Corps permit authorization where the requestor determines *that it is in his or her best interest to do so ... even where initial indications are that the Jurisdictional Waters on a parcel may not be jurisdictional*” (USACE 2016).

A significant nexus evaluation is not necessary to obtain a PJD. An AJD is an official USACE determination that WOTUS are either present or absent on a particular site. An AJD precisely identifies the limits of those waters on the project site determined to be jurisdictional under the CWA, and a significant nexus determination is required to obtain an AJD.

Due to the fact that none of the mapped features are expected to be impacted by the Project, neither a PJD nor an AJD are recommended for this Project.

## IMPACTS

The four mapped features within the DA are located outside of proposed permanent and temporary impact limits for the Project. No impact is anticipated to regulated aquatic resources.

## CONCLUSION AND RECOMMENDATIONS

A total of 0.007 acre of ephemeral drainages and 0.015 acre of roadside ditch have been mapped within the DA. Only the ephemeral drainages are considered to be potentially jurisdictional to the USACE and RWQCB whereas all of the features are considered to be potentially jurisdictional to the CDFW. These acreages represent a calculated estimation of the jurisdictional area within the DA and

are subject to modification following an agency review and/or verification process. The areas mapped would be considered jurisdictional under California Fish and Game Code Section 1600, as streambed (0.022 acre).

Of the 0.070 acre of ephemeral drainages within the DA, none occur within the Project impact area. As the project is currently planned, none of the jurisdictional features identified in this report would be filled or altered. Should any of the jurisdictional features be filled or altered, permits would likely be required from the USACE and RWQCB for impacts to Features 1-3 and alteration of any of these features would also require a permit pursuant to Section 1600 of the California Fish and Game Code. Any needed permits from each respective agency will need to be issued prior to any disturbance to aquatic resources within the DA.

If you have any questions regarding the information we have provided in this letter, or if you need further assistance, please contact me at (909) 307-0046.

Sincerely,



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Scott I. Taylor  
Senior Biological Program Manager

Attachments: as stated

**ATTACHMENT A: PHOTO COMPENDIUM**



Photo 1. Sheet flow areas



Photo 2. Sheet flow areas



Photo 3. Existing reservoir outlet location



Photo 4. Non-jurisdictional gully through DA



Photo 5. Non-jurisdictional gully through DA



Photo 6. Roadside ditch (Feature 4)



Photo 7. Ephemeral drainage (Feature 3)



Photo 8. Ephemeral drainage (Feature 2)



Photo 9. Ephemeral drainage (Feature 2)



Photo 10. Ephemeral drainage (Features 1 and 2)

## **ATTACHMENT B: LIST OF PLANT SPECIES**

SCIENTIFIC NAME	COMMON NAME
<b>ANGIOSPERMS (DICOTYLEDONS)</b>	
<b>ASTERACEAE</b>	<b>SUNFLOWER FAMILY</b>
<i>Ambrosia acanthicarpa</i>	annual bursage
<i>Ericameria nauseosa</i>	rabbitbrush
<i>Isocoma</i> sp.	goldenbush
<i>Senecio flaccidus</i>	threadleaf ragwort
<i>Stephanomeria</i> sp.	wirelettuce
<b>BORAGINACEAE</b>	<b>BORAGE FAMILY</b>
<i>Amsinckia</i> sp.	fiddleneck
<b>BRASSICACEAE</b>	<b>MUSTARD FAMILY</b>
<i>Hirschfeldia incana</i> *	short-podded mustard
<b>CACTACEAE</b>	<b>CACTUS FAMILY</b>
<i>Cylindropuntia californica</i>	California cholla
<i>Opuntia basilaris</i>	beavertail cactus
<b>ERICACEAE</b>	<b>HEATH FAMILY</b>
<i>Arctostaphylos</i> sp.	manzanita
<b>FABACEAE</b>	<b>PEA AND LEGUME FAMILY</b>
<i>Acmispon glaber</i>	deerweed
<b>FAGACEAE</b>	<b>OAK FAMILY</b>
<i>Quercus john-tuckeri</i>	Tucker oak
<b>POLYGONACEAE</b>	<b>BUCKWHEAT FAMILY</b>
<i>Eriogonum fasciculatum</i>	California buckwheat
<b>RHAMNACEAE</b>	<b>BUCKTHORN FAMILY</b>
<i>Ceanothus leucodermis</i>	chaparral whitethorn
<i>Rhamnus ilicifolia</i>	hollyleaf redberry
<b>ROSACEAE</b>	<b>ROSE FAMILY</b>
<i>Adenostoma fasciculatum</i>	chamise
<b>VISACEAE</b>	<b>MISTLETOE FAMILY</b>
<i>Phoradendron</i> sp.	mistletoe
<b>ANGIOSPERMS (MONOCOTYLEDONS)</b>	
<b>AGAVACEAE</b>	<b>ASPARAGUS FAMILY</b>
<i>Yucca brevifolia</i>	Joshua tree

\*non-native species