Appendix F-2
2022 Jurisdictional Delineation

Honor Rancho Compressor Modernization

Delineation of Potentially Jurisdictional Waterbodies

prepared for

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1 Introduction

Caskey Biological Consulting, LLC (Caskey) prepared this delineation of potentially jurisdictional waterbodies to document the existing conditions for the Honor Rancho Compressor Modernization Project (Project) and evaluate the potential for Project-related impacts to jurisdictional waters.

The purpose of this document is to provide technical information, and to review the Project to determine to what extent the Project may impact potentially jurisdictional waterbodies.

1.1 Project Location

The Project Site is located within the approximately 700-acre Honor Rancho Storage Facility (Facility). The Facility is south of the community of Castaic east of the Newhall Ranch Road and Interstate-5 intersection. The northern portion of the Facility is within the County of Los Angeles and the southern portion within the City of Santa Clarita, California. Regionally, the Project Site is in the northern portion of Los Angeles County (Figure 1). The approximate center of the Project Site within the Facility is at latitude 34.44511°N and longitude -118.58771°W (WGS84) (Figure 2). The Project Site is depicted on the *Newhall, California* United States Geological Survey (USGS) 7.5-minute topographic quadrangle (Figure 3). The Project Site is at elevations ranging between approximately 1,075 and 1,260 feet (ft.) above mean sea level (msl).

1.2 Project Description

The modernized facility would include the following replacement equipment subject to South Coast AQMD permitting:

- Four compressor gas lean-burn engines, each rated at approximately 5,000 HP, with post-combustion emission control systems
- One aboveground 8,000-gallon aqueous urea storage tank

Ancillary equipment would also be installed, including the following equipment not subject to permitting by the South Coast AQMD:

- Two EDCs, each approximately 5,500 HP
- Hydrogen generation, storage, blending, and dispensing equipment
- Green hydrogen fueling station for company vehicles
- Microgrid comprising electric generation sources, as well as an energy storage system (ESS) and a solid oxide fuel cell (SOFC) system to generate electricity to support auxiliary and administrative electrical loads while reducing the need for onsite combustion engine electricity generation
- Compression support equipment, including cooling towers, lube oil system, tanks, filter/separators; and control, electrical, and instrumentation equipment.

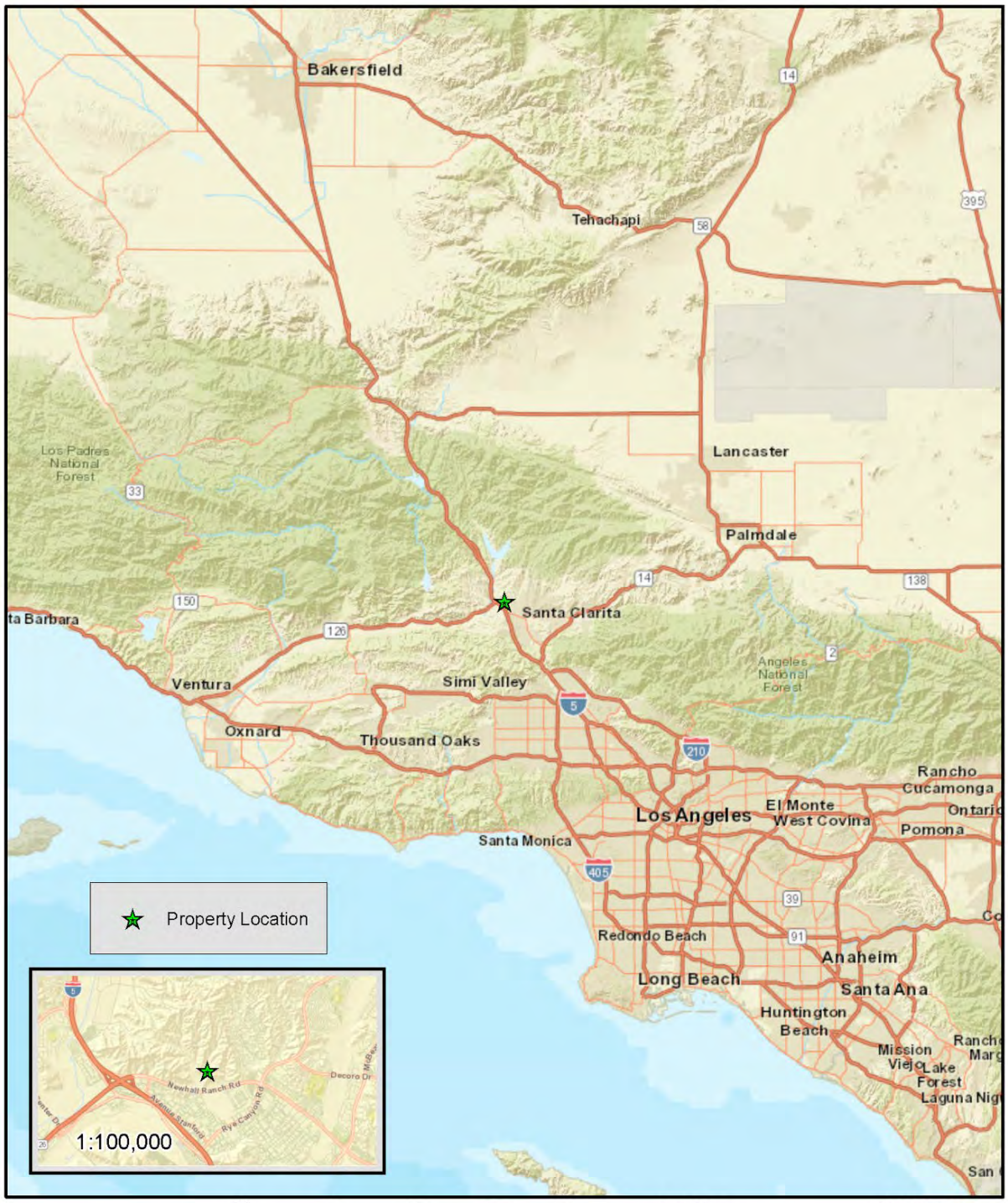

Figure 1 - Regional Location

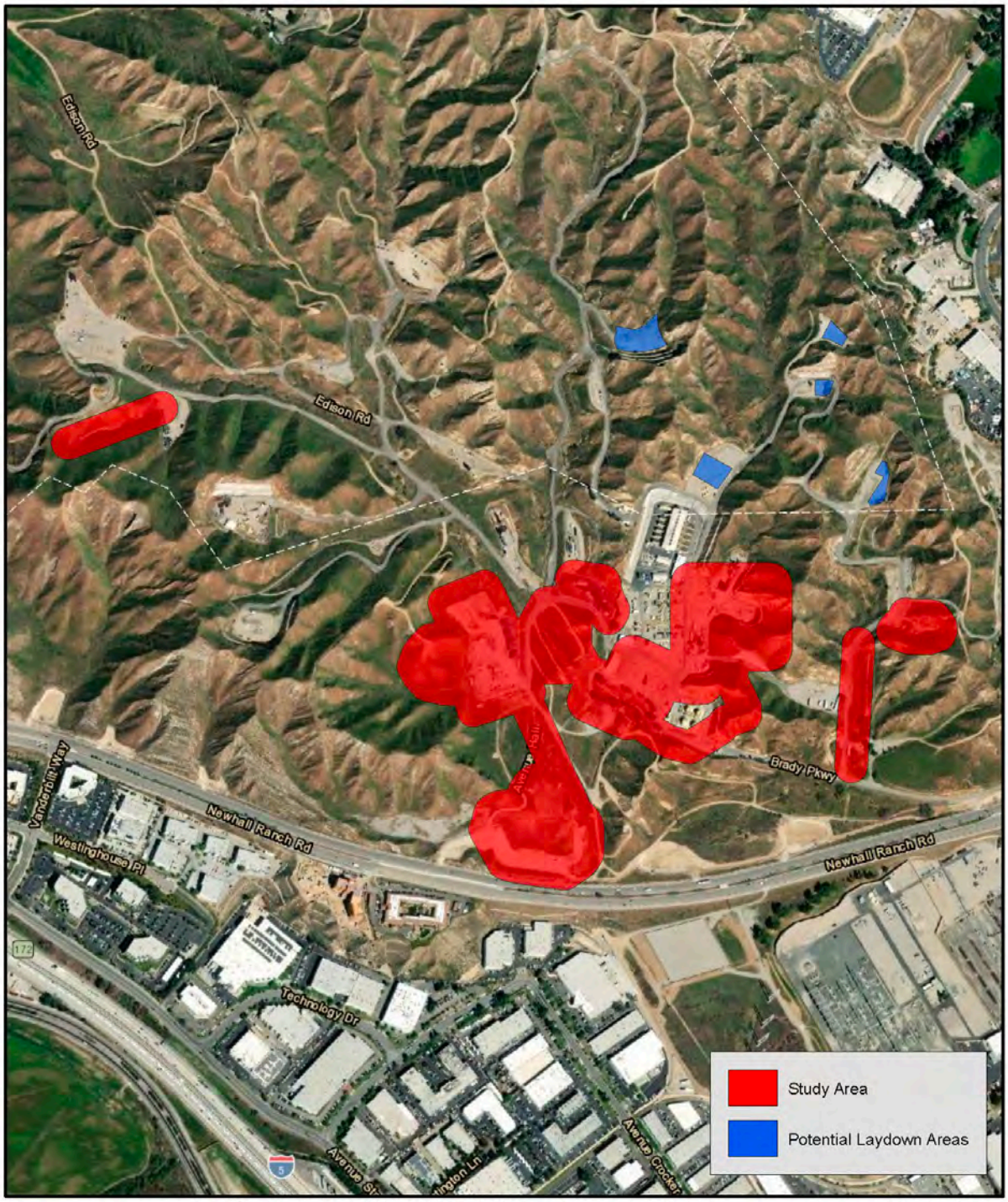

Figure 2 - Study Area Map – Aerial Photograph

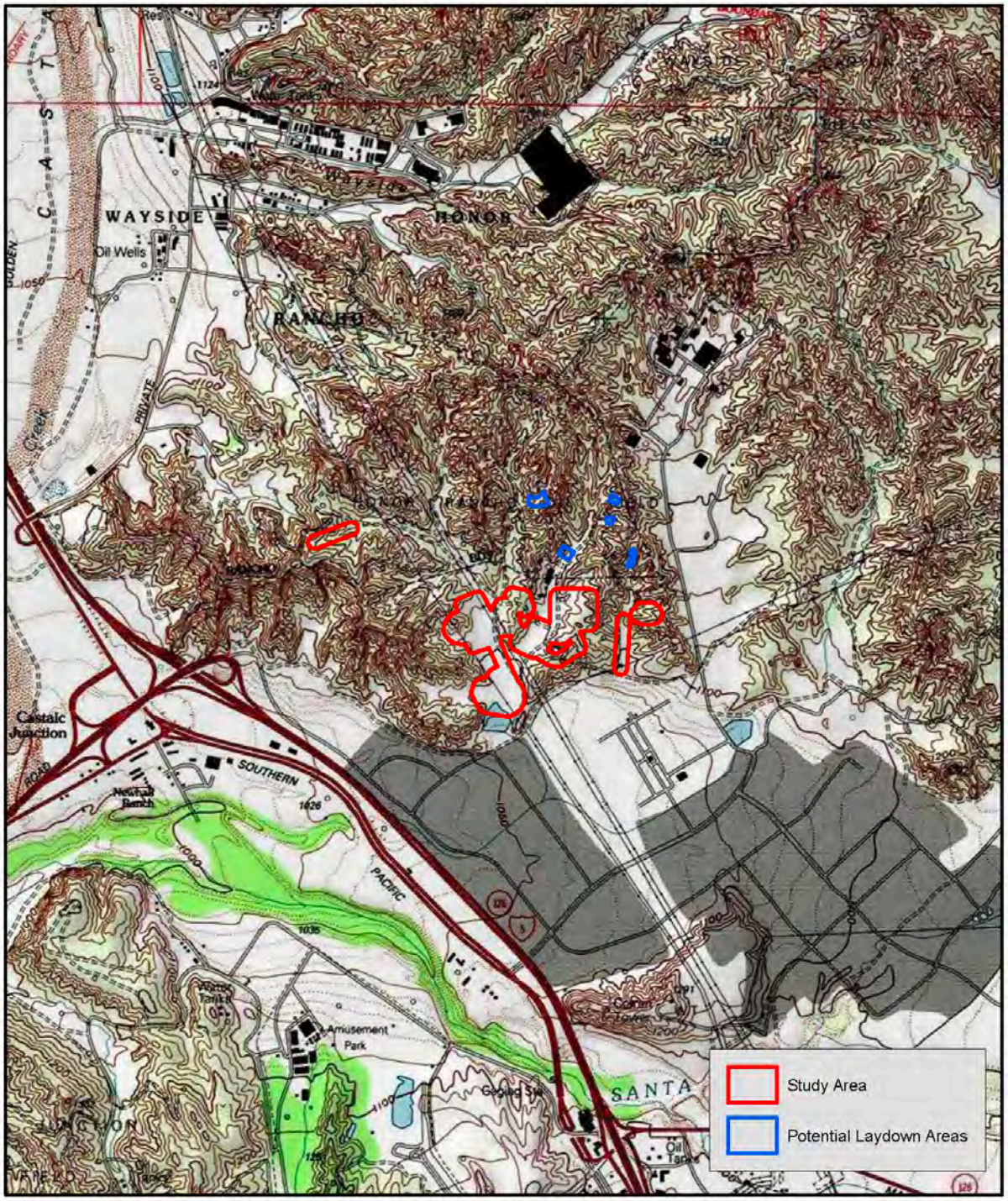

Figure 3 - Study Area Map – USGS Topographic Map

2 Methodology

2.1 Database and Literature Review

Prior to conducting the delineation, research and desktop review of readily available database resources were conducted by Caskey to obtain comprehensive information about the survey area. The review was conducted in accordance with the following, where applicable:

- U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (USACE 1987);
- Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE 2008a);
- 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);
- U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory Wetland Geodatabase (USFWS 2021);
- The National Wetland Plant List (NWPL): 2020 Wetland Ratings (USACE 2020);
- California Soil Resource Lab's Soil Web Google Earth interface (Natural Resources Conservation Service [NRCS] 2021a);
- Hydric Soils List of California, 2021 ([NRCS] 2021b); and
- USGS National Hydrography Dataset (NHD; USGS 2021).

2.2 Field Delineation

On February 24, 2021, Caskey biologists (Jason Caskey and Tim Searl) conducted pedestrian surveys by walking meandering transects within the entire Study Area to identify potentially jurisdictional waterbodies, including any potential wetlands and non-wetlands waters exhibiting an ordinary high-water mark (OHWM) that could constitute waters of the United States (WOTUS) or waters of the State (WOS), including associated riparian resources. A second survey was conducted by Caskey biologist, Jason Caskey on May 25, 2022, to assess a newly added extension to the Study Area. During the surveys, top of bank, including any associated riparian habitat, OHWM, and other observation points were mapped using Collector for ArcGIS connected to a SXBlue II + GNSS submeter unit and antenna global positioning system. Laydown areas outside of the pedestrian survey areas have been desktop reviewed and a field spot check was conducted confirming they are entirely disturbed/developed. Possible laydown areas outside of the pedestrian survey areas would be used for equipment storage, materials storage, parking, and other temporary activities in

support of the Project construction. No ground disturbance would occur at these sites. They are currently paved or compacted dirt and gravel, and used for miscellaneous purposes, including temporary storage of materials or equipment. Once a determination has been made as to which laydown sites will be used, applicable surveys would be conducted, if necessary. General site characteristics were documented, and representative photographs were taken (Appendix A). Current federal and state methods and guidelines were used to identify and delineate potential jurisdictional areas, as described below.

2.2.1 Non-Wetland Waters of the United States

The USACE defines non-wetland WOTUS in the Arid West Region by determining the OHWM in stream channels. The OHWM is defined in 33 CFR 328.3(e) as:

> *"…that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impresses on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas."*

Identification of OHWM involves assessments of stream geomorphology and vegetation response to the dominant stream discharge. Determining whether any non-wetland water is a jurisdictional WOTUS involves further assessment in accordance with the regulations, case law, and clarifying guidance as discussed below.

2.2.2 Wetland Waters of the United States

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 2008b), three indicators are used to classify an area as a wetland under the jurisdiction of the USACE: (1) a predominance of plant life that is adapted to life in wet conditions (hydrophytic vegetation); (2) soils that saturate, flood, or pond long enough during the growing season to develop anaerobic conditions in the upper part (hydric soils); and (3) permanent or periodic inundation or soil saturation, at least seasonally (wetland hydrology). The 2020 USACE National 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).

Additionally, sources of water, potential connections and distances to traditional navigable waters (TNWs), and other factors that affect whether waters qualify as WOTUS under current regulations were evaluated. Due to recent efforts by the USACE to replace the Clean Water Rule with the pre-existing regulations and guidance, specific attention was dedicated during the survey to any features where jurisdictional status would be affected by the regulatory changes.

2.2.3 Waters of the State

The State Water Resources Control Board (SWRCB) has formally implemented the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (SWRCB 2019)*, which provides a wetland definition, framework for determining if a wetland is a water of the State, and wetland delineation procedures. The SWRCB defines an area as a 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 WOTUS and WOS 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. The SWRCB Procedures only apply to wetlands, and they do not include updated definitions or delineation methods for non-wetland aquatic features

The limits of waters of the State, as defined under the Porter-Cologne Act (California Water Code section 13000 et seq.), were determined by first examining the topography and morphology to identify those features with an OHWM. The extent of waters of the State was delineated within these features as the boundaries of the streams/channels OHWM, coterminous with USACE's jurisdiction.

2.2.4 California Department of Fish and Wildlife (CDFW) Streams and Riparian Habitat

The extent of potential streambeds, streambanks, and riparian habitat subject to CDFW jurisdiction under Section 1600 et seq. of the California Code, Fish and Game Code 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.

3 Existing Conditions

This section summarizes the results of the literature review and jurisdictional delineation. Discussions regarding the general environmental setting, vegetation communities present, soil types, and regional and local hydrology are described below. Representative photographs of the Study Area are provided in Appendix B.

The Study Area is located south of the community of Castaic, Los Angeles County, California, east of the Newhall Ranch Road and Interstate-5 intersection. Regionally, the Project Site is located in the northern portion of Los Angeles County, north of Santa Clarita. Land uses in and around the Study Area consist of an active natural gas compressor station, an active electrical substation, commercial office buildings, and residential areas.

3.1 Soils

The USDA NRCS Web Soil Survey depicts two unique soil units within the Study Area: Castaic-Balcom silty clay loams, 30 to 50 percent slopes, eroded, soil map unit and the Metz loam, 2 to 5 percent slopes, excessively drained soil map unit (Figure 4).

Castaic-Balcom silty clay loams, 30 to 50 percent slopes is a well-drained soil that occurs on hillsides and slopes. This soil type derives from residuum weathered from sedimentary rock and has a typical soil profile of silty clay loam to 26-inches. The soil contains a non-saline to very slightly saline content (0.0 to 2.0mmhos/cm) (NRCS 2021).

Metz loam, 2 to 5 percent slopes, is a excessively drained soil that occurs on alluvial fans and flood plains. The soil type is derived from alluvium and has a typical soil profile of loam to 10-inches and stratified sand to loamy sand from 10 to 60-inches. The soil contains a non-saline to slightly saline content (0.0 to 2.0mmhos/cm) (NRCS 2021).

3.2 Vegetation Communities and Land Cover

Vegetation communities and land cover types in the Study Area include ruderal/sage bush scrub, ruderal grasslands, and Developed/Disturbed, which contain areas of sparse to no vegetation (Figure 5). Characterization of the plant communities are based on *A Manual of California Vegetation* (Sawyer 2009). For a full list of vegetation observed during the reconnaissance survey, please refer to Appendix B.

- **Chamise chaparral**: This community was present in the eastern portion of the Study Area on a steep north-facing slope above a paved road. Chamise (*Adenostoma fasciculatum*) was dominant with associate species primarily consisting of chaparral bush mallow, deerweed (*Acmispon glaber*), California buckwheat (*Eriogonum fasciculatum*), purple sage (*Salvia leucophylla*), and blue elderberry (*Sambucus nigra* subsp. *caerulea*) though those were sparse.

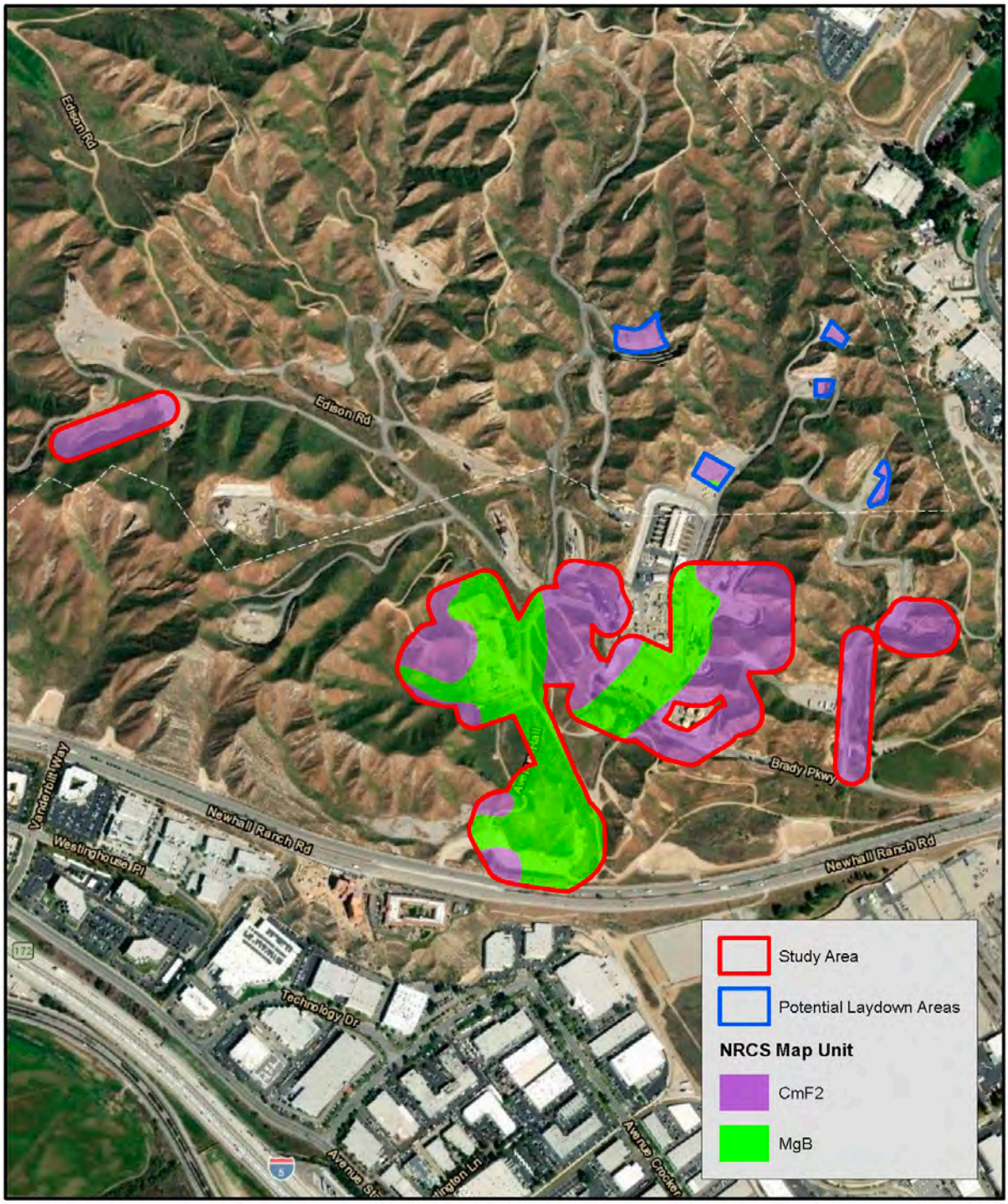

Figure 4 – Soils Map

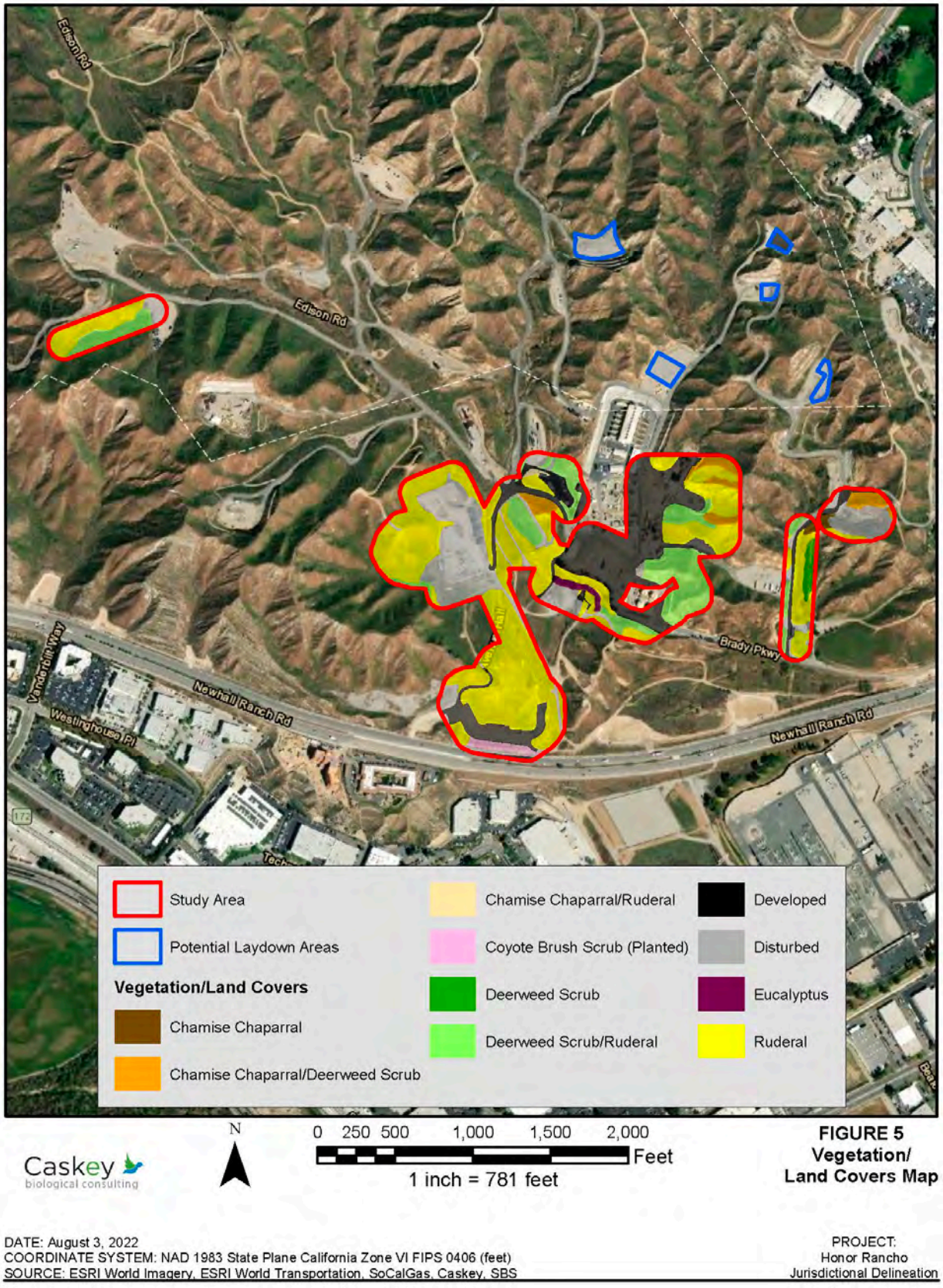

Figure 5 – Vegetation/Land Covers Map

- **Chamise chaparral/Deerweed scrub**: This community was primarily present in the eastern portion of the Study Area on north-facing slopes. The eastern half of the Study Area appeared to sustain less fire damage, or less fire intensity, than the western portion from the recent most recent fire. Though this was the case, the majority of the chamise present consisted of resprouts. chamise and deerweed, an early successional species in chaparral/sage scrub habitats, were codominant throughout with little understory exposed.
- **Chamise chaparral/Ruderal**: This community was primarily present in the western portion of the Study Area on north-facing slopes. The chamise chaparral was in recovery from the recent fire and consisted of an open canopy with the understory consisting of dense ruderal habitat. Ruderal areas consisted of non-native, weedy vegetation such as ripgut grass (*Bromus diandrus*), slender wild oat (*Avena barbata*), red brome (*Bromus rubens*), wall barley (*Hordeum murinum*), red-stemmed filaree (*Erodium cicutarium*), black mustard (*Brassica nigra*), and tocalote (*Centaurea melitensis*) dominant.
- **Coyote brush scrub (Planted)**: This community was present in the southern portion of the Study Area along Newhall Ranch Road. It was artificial in that it was planted and irrigated and primarily consisted of coyote brush (*Baccharis pilularis*).
- **Deerweed scrub**: This community was primarily present throughout the Study Area and occurred in small patches. Deerweed was dominant and dense with very little of the understory exposed.
- **Deerweed scrub/Ruderal**: This mixed community was the second-most abundant vegetation community within the Study Area. It consisted of a mix of deerweed and ruderal habitat described above.
- **Developed**: This land cover consisted of developed areas and included paved main facility and paved roads. It also included hardscape such as concrete storm control facilities and bank stabilization. Some ornamental plants, such as gum trees (*Eucalyptus* spp.), were included in this area within the main facility.
- **Disturbed**: This land cover consisted of gravel pads, active construction sites, and unpaved roads/shoulder areas.
- **Eucalyptus**: This non-native community was present in the central portion of the Study Area and consisted of single-strand of planted gum trees.

3.3 Hydrology

The Study Area is located within the Ventura Basin Hydrological Unit Code (HUC) 180701 of the Santa Clara River watershed. The Santa Clara River is the largest river system in southern California and drains an area encompassing approximately 1,200 square miles. The river's head waters are located in the northern slope of the San Gabriel Mountains in Los Angeles County and has a terminus at the Pacific Ocean between San Buenaventura and Oxnard in Ventura County (USGS 2021).

Caskey reviewed the USFWS National Wetlands Inventory (NWI) prior to conducting the delineation. There were no mapped areas indicating potential wetlands are waterways within

the NWI database search. However, a review of the USGS National Hydrography Dataset (NHD) revealed the potential for multiple ephemeral streams that have the potential to drain into the nearby Santa Clara River. Additionally, a review of the Wetlands Climate Tables (WETS) indicated that the area encompassing the Study Area is currently experiencing moderate drought conditions (Appendix C)

4 Results

Based on Caskey's assessment, there were three ephemeral waterways observed within the Study Area. No wetland features were observed within the Study Area. Delineation field data sheets are located in Appendix D. The following is a summary of all potentially jurisdictional waterbodies within the Study Area.

4.1 Summary of Potentially Jurisdictional Areas

Within the Study Area, there were five ephemeral waterways identified during the jurisdictional delineation. Table 1 summarizes the designated acreages of potential jurisdictional waters within the Study Area.

Table 1 - Potential Jurisdictional Waters within the Study Area

Feature	Non-Wetland Waters of the United States/State[1] (acres)	Waters of the State[2] (acres)	CDFW Jurisdictional Area[3] (acres)
Ephemeral A	0.17	0.00	1.26
Ephemeral A-1	0.03	0.00	0.12
Ephemeral B	0.005	0.00	0.08
Drainage Basin	2.84	0.00	4.27
Ephemeral C	0.00	0.13	0.13
Ephemeral D	0.00	0.30	0.30
Total	**3.045**	**0.43**	**6.26**

[1]Calculated to the OHWM

[2]Under the Porter-Cologne Act only

[3]Calculated to top of bank or outer limits of the associated riparian vegetation (i.e. drip line, whichever is greater.)

Ephemeral A – This unmapped, unnamed, non-wetland ephemeral stream is located within the west and southwest portions of the Honor Rancho Compressor Station property boundary (Figure 6-7). The ephemeral feature originates outside of the Study Area and flows from the north to the south before terminating in a flood control drainage basin located in the southwest portion of the property directly adjacent to Newhall Ranch Rd. This feature is comprised of an unconsolidated bottom consisting of sand, gravel and cobble. No surface water was present

during the time of the field delineation. Changes in soil texture, vegetation densities, and the presence of litter and debris were defining characteristics of the OHWM and top of banks. Dominant vegetation included deerweed (*Acmispon glaber*), black mustard (*Brassica nigra*), and slender oat (*Avena barbata*); no riparian vegetation was observed to be associated with this feature. This feature would be potentially subject to the jurisdiction of the USACE, RWQCB and CDFW.

Ephemeral A-1 – This unmapped, unnamed, non-wetland ephemeral stream is located within the west and northwest portions of the Honor Rancho Compressor Station property boundary (Figure 6-7). This feature originated south of the Study Area and flows from the north to the southwest before terminating into Ephemeral A. This feature is comprised of an unconsolidated bottom consisting of sand, gravel and cobble. No surface water was present during the time of the field delineation. Changes in soil texture, vegetation densities, and the presence of litter and debris were defining characteristics of the OHWM and top of banks. Dominant vegetation included deerweed (*Acmispon glaber*), slender buckwheat (*Eriogonum gracile*), and black mustard (*Brassica nigra*); no riparian vegetation was observed to be associated with this feature. This feature is potentially subject to the jurisdiction of the USACE, RWQCB and CDFW.

Ephemeral B - This unmapped, unnamed, non-wetland ephemeral stream is located within the west and southwest portions of the Honor Rancho Compressor Station property boundary (Figure 6-7). The ephemeral feature originates as storm water runoff caused by a transmission powerline tower located onsite. This feature is comprised of an unconsolidated bottom consisting of sand, gravel and cobble. No surface water was present during the time of the field delineation. Changes in soil texture, vegetation densities, and the presence of litter and debris were defining characteristics of the OHWM and top of banks. Dominant vegetation included deerweed (*Acmispon glaber*), and black mustard (*Brassica nigra*); no riparian vegetation was observed to be associated with this feature. This feature is potentially subject to the jurisdiction of the USACE, RWQCB, and CDFW.

Drainage Basin – This human-created drainage basin is located within the southwest portion of the Honor Rancho Compressor Station property boundary (Figure 6-7) to control potential flood waters from heavy rains. The drainage basin, when full of water, enters an overflow culvert where it flows through a concrete lined drainage canal before reaching terminus at the Santa Clara River. Ephemeral A, Ephemeral A-1, and Ephemeral B terminate into this feature. The drainage basin is dominated with desiccated herbaceous plants that could not be identified due to regular maintenance activities. No surface water was present during the time of the field delineation. The concrete lined sloped banks were the defining characteristics of the OHWM and top of banks. Due to downstream connectivity to the Santa Clara River, this feature is potentially subject to the jurisdiction of the USACE, RWQCB, and CDFW.

Ephemeral C - This unmapped, unnamed, non-wetland ephemeral stream is located within the west and northwest portions of the Honor Rancho Compressor Station property boundary adjacent to the proposed Wezu 28 Drilling Pad extension (Figure 6). The ephemeral feature originates as storm water runoff from a concrete v-ditch on the side of the hill. This feature is

comprised of an unconsolidated bottom consisting of sand, gravel and cobble. No surface water was present during the time of the field delineation. Changes in soil texture, vegetation densities, and the presence of litter and debris were defining characteristics of the OHWM and top of banks. Dominant vegetation included deerweed (*Acmispon glaber*), and black mustard (*Brassica nigra*); no riparian vegetation was observed to be associated with this feature. This feature is expected to be subject to the jurisdiction of the RWQCB and CDFW.

Ephemeral D - This unmapped, unnamed, non-wetland ephemeral stream is located within the east and southeast portions of the Honor Rancho Compressor Station property boundary (Figure 6). The ephemeral feature originates as storm water runoff out of a culvert from an existing access road. The upstream of this feature is comprised of an unconsolidated bottom consisting of sand, gravel and cobble before transitioning into a concrete lined ditch in the downstream. The feature terminates into a small basin adjacent to Brady Pkwy. No surface water was present during the time of the field delineation. Changes in soil texture, vegetation densities, and the presence of litter and debris were defining characteristics of the OHWM and top of banks. Dominant vegetation included deerweed (*Acmispon glaber*), and black mustard (*Brassica nigra*); no riparian vegetation was observed to be associated with this feature. This feature is expected to be subject to the jurisdiction of the RWQCB and CDFW.

4.1 Conclusion and Recommendations

Based on Caskey's assessment, a total of 3.045 acre of non-wetland waters within the Study Area are potentially under the jurisdiction of the USACE and RWQCB, a total of 0.43 acre are potentially under the jurisdiction of the State under the Porter-Cologne Act, while a total of 6.26 acres are potentially under the jurisdiction of CDFW. Based upon the ephemeral nature of the delineated features, there were no wetlands observed within the Study Area.

The findings and conclusions presented in this report, including the location and extent of waterbodies potentially subject to regulatory jurisdiction, represent the professional opinion of the consulting biologists. These findings and conclusions should be considered preliminary until verified by the appropriate regulatory agencies. We recommend that these agencies be consulted to confirm the jurisdictional assessment, and that all required permits be acquired prior to initiating any future projects.

Figure 6 - Jurisdictional Delineation USACE & RWQCB Results

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Appendix A: Site Photographs

Feature A - Upstream

Feature A - Downstream

Feature A - Upstream

Feature A - Downstream

Feature A - Downstream

Feature A - Culvert

Feature A - Terminus

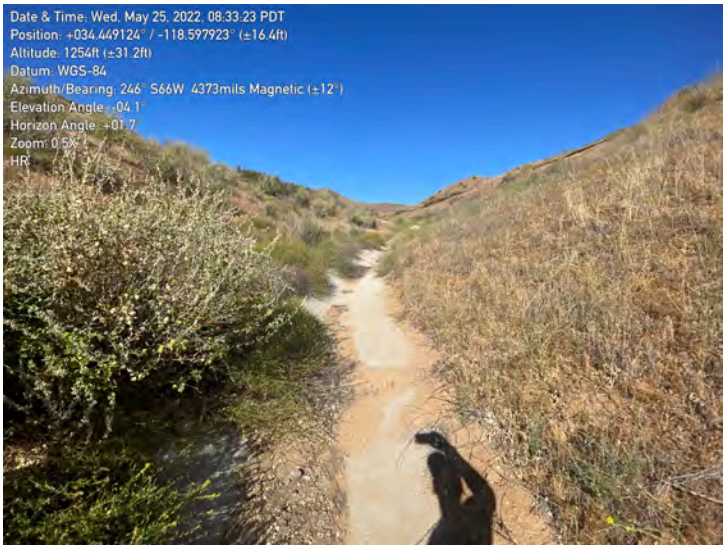
Feature A1 - Upstream

Feature A1 Connects to Feature A

Feature B - Upstream

Feature B - Terminus

Flood Control Basin



Feature C - Upstream

Feature C - Downstream

Feature C - Overview

Feature D - Upstream

Feature D - Upstream

Feature D - Downstream

Appendix B: Plant Species List

Plant Species Observed within Study Area

Scientific Name	Common Name	Indicator
FERNS		
PTERIDACEAE	**BRAKE FAMILY**	
Pellaea andromedifolia	coffee fern	UPL
Pentagramma triangularis subsp. *triangularis*	California goldback fern	UPL
GYMNOSPERMS		
PINACEAE	**PINE FAMILY**	
Pinus sp.	pine	UNK
ANGIOSPERMS (EUDICOTS)		
ADOXACEAE	**MUSKROOT FAMILY**	
Sambucus nigra subsp. *caerulea*	blue elderberry	FACU
ANACARDIACEAE	**SUMAC OR CASHEW FAMILY**	
Rhus aromatica	skunkbrush	FACU
APIACEAE	**CARROT FAMILY**	
Lomatium utriculatum	common lomatium	UPL
ASTERACEAE	**SUNFLOWER FAMILY**	
Acourtia microcephala	sacapellote	UPL
Artemisia californica	California sagebrush	UPL
Baccharis pilularis	coyote brush	UPL
Baccharis salicifolia subsp. *salicifolia*	mule fat	FAC
*Centaurea melitensis**	tocalote	UPL
Chaenactis glabriuscula var. *glabriuscula*	yellow pincushion	UPL
Deinandra fasciculata	fascicled tarweed	FACU
Encelia farinosa	brittlebush	UPL
Erigeron canadensis	horseweed	FACU
Gutierrezia californica	california matchweed	UPL
*Hypochaeris glabra**	smooth cat's-ear	UPL
*Lactuca serriola**	prickly lettuce	FACU
Lasthenia gracilis	common goldfields	FACU
Lepidospartum squamatum	scale-broom	FACU
Logfia filaginoides	California fluffweed	UPL
*Senecio vulgaris**	common groundsel	FACU
*Sonchus oleraceus**	common sow thistle	UPL
Uropappus lindleyi	silver puff	UPL
BORAGINACEAE	**BORAGE FAMILY**	
Amsinckia intermedia	Rancher's fiddleneck	UPL
Amsinckia menziesii	common fiddleneck	UPL
Cryptantha intermedia	common forget-me-not	UPL
Emmenanthe penduliflora	whispering bells	UPL

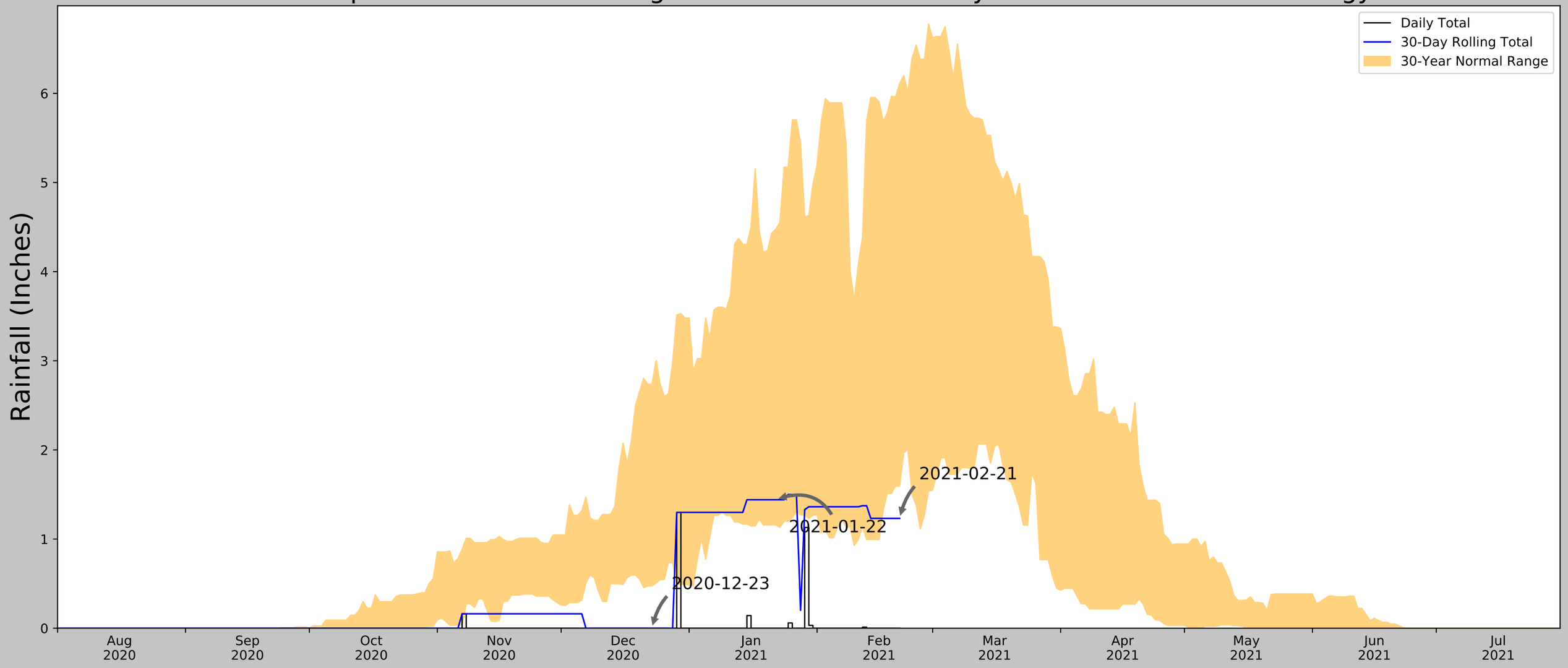
Pectocarya linearis subsp. *ferocula*	slender pectocarya	UPL
Phacelia distans	wild heliotrope	UPL
Phacelia parryi	parry's phacelia	UPL
Pholistoma membranaceum	white fiesta flower	UPL
Plagiobothrys canescens	valley popcornflower	UPL
BRASSICACEAE	**MUSTARD FAMILY**	
*Brassica nigra**	black mustard	UPL
Lepidium nitidum	shining peppergrass	UPL
*Sisymbrium altissimum**	tumble mustard	FACU
Thysanocarpus radians	ribbed fringepod	UPL
CACTACEAE	**CACTUS FAMILY**	
Opuntia basilaris	beavertail cactus	UPL
CHENOPODIACEAE	**GOOSEFOOT FAMILY**	
Chenopodium californicum	California goosefoot	UPL
*Salsola tragus**	Russian thistle	FACU
CONVOLVULACEAE	**MORNING-GLORY FAMILY**	
Calystegia macrostegia subsp. *intermedia*	south coast morning-glory	UPL
Cuscuta californica var. *californica*	chaparral dodder	UPL
CRASSULACEAE	**STONECROP FAMILY**	
Crassula connata	pygmy-weed	FAC
Dudleya sp.	dudleya	UNK
CUCURBITACEAE	**GOURD FAMILY**	
Cucurbita palmata	coyote melon	UPL
Marah macrocarpa	wild cucumber	UPL
EUPHORBIACEAE	**SPURGE FAMILY**	
Chamaesyce albomarginata	rattlesnake weed	UPL
Croton setiger	turkey-mullein	UPL
Stillingia linearifolia	linear-leaved stillingia	UPL
FABACEAE	**LEGUME FAMILY**	
Acmispon glaber	deerweed	UPL
Acmispon strigosus	strigose lotus	UPL
Astragalus didymocarpus var. *didymocarpus*	white dwarf locoweed	UPL
Astragalus trichopodus var. *lonchus*	ocean locoweed	UPL
Lupinus bicolor	miniature lupine	UPL
Lupinus hirsutissimus	stinging lupine	UPL
Lupinus microcarpus var. *microcarpus*	red-flower lupine	UPL
Lupinus sparsiflorus	Coulter's lupine	UPL
Lupinus truncatus	collar lupine	UPL
*Medicago polymorpha**	bur clover	UPL
*Melilotus indicus**	Indian sweetclover	FACU
Trifolium ciliolatum	tree clover	UPL

FAGACEAE	**OAK FAMILY**	
Quercus berberidifolia	scrub oak	UPL
Quercus lobata	valley oak	FACU
GERANIACEAE	**GERANIUM FAMILY**	
*Erodium cicutarium**	red-stemmed filaree	UPL
GROSSULARIACEAE	**GOOSEBERRY FAMILY**	
Ribes quercetorum	oak gooseberry	UPL
LAMIACEAE	**MINT FAMILY**	
*Marrubium vulgare**	horehound	FACU
Salvia apiana	white sage	UPL
Salvia columbariae	chia	UPL
Salvia leucophylla	purple sage	UPL
Salvia mellifera	black sage	UPL
Trichostema austromontanum subsp. *austromontanum*	San Jacinto bluecurls	OBL
LOASACEAE	**LOASA FAMILY**	
Mentzelia affinis	hydra stick-leaf	UPL
MALVACEAE	**MALLOW FAMILY**	
Malacothamnus fasciculatus	mesa bushmallow	UPL
*Malva parviflora**	cheeseweed	UPL
MONTIACEAE	**MINER'S LETTUCE FAMILY**	
Calandrinia ciliata	red maids	FACU
MYRSINACEAE	**MYRSINE FAMILY**	
*Anagallis arvensis**	scarlet pimpernel	UPL
MYRTACEAE	**MYRTLE FAMILY**	
Eucalyptus sp.*	gum tree	FAC
NYCTAGINACEAE	**FOUR O'CLOCK FAMILY**	
Mirabilis laevis	wishbone bush	UPL
ONAGRACEAE	**EVENING PRIMROSE FAMILY**	
Camissoniopsis bistorta	California sun cup	UPL
Eulobus californicus	California evening primrose	UPL
OROBANCHACEAE	**BROOM-RAPE FAMILY**	
Castilleja exserta subsp. *exserta*	purple owl's-clover	UPL
PAPAVERACEAE	**POPPY FAMILY**	
Eschscholzia caespitosa	tufted poppy	UPL
Eschscholzia californica	California poppy	UPL
PLANTAGINACEAE	**PLANTAIN FAMILY**	
Plantago ovata	woolly plantain	FACU
POLEMONIACEAE	**PHLOX FAMILY**	
Gilia angelensis	angel gilia	UPL
POLYGONACEAE	**BUCKWHEAT FAMILY**	
Chorizanthe staticoides	Turkish rugging	UPL
Eriogonum fasciculatum	California buckwheat	UPL

RHAMNACEAE	**BUCKTHORN FAMILY**	
Ceanothus cuneatus	buck brush	UPL
ROSACEAE	**ROSE FAMILY**	
Adenostoma fasciculatum	chamise	UPL
Heteromeles arbutifolia	toyon	UPL
SOLANACEAE	**NIGHTSHADE FAMILY**	
*Nicotiana glauca**	tree tobacco	FAC
Solanum xanti	chaparral nightshade	UPL
TAMARICACEAE	**TAMARISK FAMILY**	
*Tamarix ramosissima**	Mediterranean tamarisk	FAC
ANGIOSPERMS (MONOCOTS)		
AGAVACEAE	**AGAVE FAMILY**	
Hesperoyucca whipplei	Our Lord's candle	UPL
LILIACEAE	**LILY FAMILY**	
Calochortus clavatus subsp. Pallidus	clubhair mariposa lily, pale yellow mariposa	UPL
POACEAE	**GRASS FAMILY**	
*Avena barbata**	slender wild oat	UPL
*Bromus diandrus**	ripgut grass	UPL
*Bromus hordeaceus**	soft chess	FACU
Bromus madritensis subsp. *rubens**	red brome	UPL
*Bromus tectorum**	cheat grass	UPL
Elymus condensatus	giant wild rye	UPL
Festuca microstachys	small fescue	UPL
*Festuca myuros**	rat-tail fescue	UPL
*Hordeum murinum**	glaucous foxtail barley	FACU
Melica imperfecta	coast range melic	UPL
*Schismus barbatus**	Mediterranean schismus	UPL
Stipa pulchra	purple needlegrass	UPL
THEMIDACEAE	**BRODIAEA FAMILY**	
Bloomeria crocea	common goldenstar	UPL
Dichelostemma capitatum subsp. *capitatum*	blue dicks	FACU
Dichelostemma capitatum subsp. *pauciflorum*	few-flower blue dicks	UPL
Muilla maritima	common muilla	UPL
*Non-Native Species, +Ornamental, Unlikely to be Invasive		

Appendix C: WETS Table

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	34.444949, -118.587649
Observation Date	2021-02-21
Elevation (ft)	1115.43
Drought Index (PDSI)	Moderate drought (2021-01)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30^{th} %ile (in)	70^{th} %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2021-02-21	1.594882	6.112205	1.232284	Dry	1	3	3
2021-01-22	1.158268	4.476378	1.440945	Normal	2	2	4
2020-12-23	0.473622	2.735827	0.0	Dry	1	1	1
Result							Drier than Normal - 8

Figure and tables made by the
Antecedent Precipitation Tool
Version 1.0

Written by Jason Deters
U.S. Army Corps of Engineers

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days (Normal)	Days (Antecedent)
PIRU 2 ESE	34.4061, -118.7569	711.942	10.013	403.488	8.546	10118	69
SANTA CLARITA 3.1 WSW	34.3898, -118.5569	1250.984	4.194	135.554	2.456	0	2
NEWHALL S FC32CE	34.3869, -118.5342	1232.94	5.037	117.51	2.858	150	0
NEWHALL 5NW	34.3933, -118.5939	1765.092	3.586	649.662	3.944	994	0
NEWHALL	34.3667, -118.5667	1399.934	5.537	284.504	4.067	30	0
CANYON COUNTRY 2.6 E	34.4268, -118.4275	1617.126	9.212	501.696	8.767	0	10
NORTHRIDGE CAL STATE	34.2447, -118.525	903.871	14.29	211.559	9.454	61	0
THOUSAND OAKS 2.3 NE	34.2149, -118.8367	1092.848	21.321	22.582	10.076	0	8
VAN NUYS AP	34.2097, -118.4892	770.013	17.197	345.417	13.679	0	1

Appendix D: USACE Arid West Ephemeral & Intermittent Streams OHWM Datasheets

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Honor Rancho Compressor Modernization
Project Number: N/A
Stream: Ephemeral A
Investigator(s): J. Caskey, T. Searl

Date: 2/24/21 **Time:** 1130
Town: Castaic **State:** CA
Photo begin file#: **Photo end file#:**
Site photos are in Appendix B.

Y ☑ / N ☐ Do normal circumstances exist on the site?

Y ☑ / N ☐ Is the site significantly disturbed?

Location Details:
Honor Rancho Compressor Station

Projection: **Datum:**
Coordinates: 34.4441, -118.5895

Potential anthropogenic influences on the channel system:
Feature is influenced by stormwater runoff stemming from the Honor Rancho compressor station. Multiple culverts and drainages observed leading into ephemeral A.

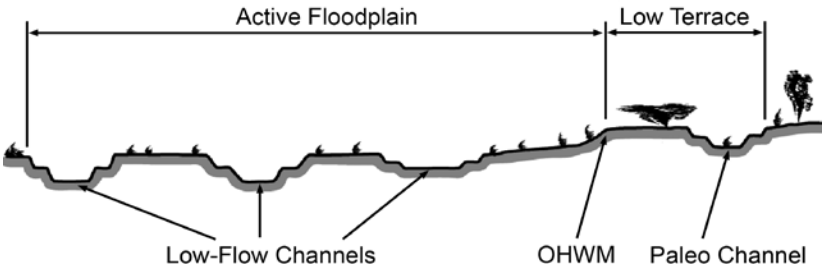
Brief site description:
Stud Area is within an active natural gas compressor station operated by SoCalGas.

Checklist of resources (if available):

- ☑ Aerial photography
  Dates: 2019
- ☑ 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

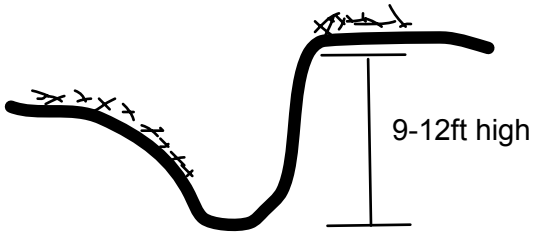


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

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: **Cross section ID:** **Date:** 2/24/21 **Time:**

Cross section drawing:



OHWM

GPS point: 34.4441, -118.5895

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☑ Change in vegetation cover
- ☑ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

Floodplain unit: ☑ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: 34.4441, -118.5895

Characteristics of the floodplain unit:

Average sediment texture: Cobble, granual, coarse sand

Total veg cover: 40 % Tree: 0 % Shrub: 5 % Herb: 35 %

Community successional stage:

- ☐ NA
- ☑ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☑ Drift and/or debris
- ☑ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Feature collects stormwater runoff from the compressor station.

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Honor Rancho Compressor Modernization
Project Number: N/A
Stream: Ephemeral A-1
Investigator(s): J. Caskey, T. Searl

Date: 2/24/21 **Time:** 1150
Town: Castaic **State:** CA
Photo begin file#: **Photo end file#:**
Site photos are in Appendix B.

Y ☑ / N ☐ Do normal circumstances exist on the site?

Y ☑ / N ☐ Is the site significantly disturbed?

Location Details:
Honor Rancho Compressor Station

Projection: **Datum:**
Coordinates: 34.4461, -118.5898

Potential anthropogenic influences on the channel system:
Feature is influenced by stormwater runoff stemming from the Honor Rancho compressor station. Multiple culverts and drainages observed leading into ephemeral A.

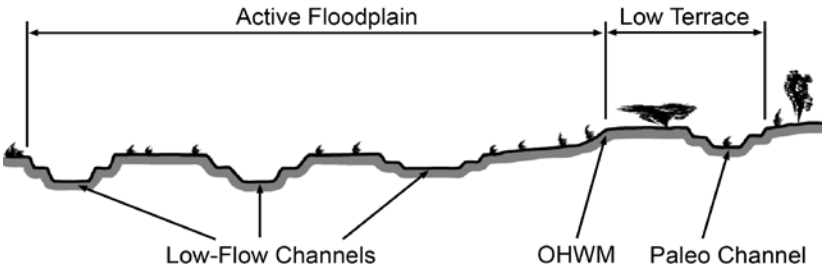
Brief site description:
Stud Area is within an active natural gas compressor station operated by SoCalGas.

Checklist of resources (if available):

- ☑ Aerial photography
  Dates: 2019
- ☑ 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

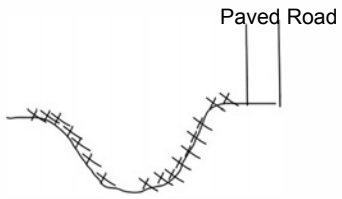


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

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: **Cross section ID:** **Date:** 2/24/21 **Time:**

Cross section drawing:



OHWM

GPS point: 34.4461, -118.5899

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☑ Change in vegetation cover
- ☑ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:

Floodplain unit: ☑ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: 34.4461, -118.5898

Characteristics of the floodplain unit:

Average sediment texture: Cobble, granual, coarse sand

Total veg cover: 40 % Tree: 0 % Shrub: 5 % Herb: 35 %

Community successional stage:

- ☐ NA
- ☑ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☑ Drift and/or debris
- ☑ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Feature collects stormwater runoff from the compressor station. Feature drains into Ephemeral A.

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Honor Rancho Compressor Modernization **Date:** 2/24/21 **Time:** 1330
Project Number: N/A **Town:** Castaic **State:** CA
Stream: Ephemeral B **Photo begin file#:** **Photo end file#:**
Investigator(s): J. Caskey, T. Searl Site photos are in Appendix B.

Y ☑ / N ☐ Do normal circumstances exist on the site?

Y ☑ / N ☐ Is the site significantly disturbed?

Location Details:
Honor Rancho Compressor Station

Projection: **Datum:**
Coordinates: 34.4434, -118.5893

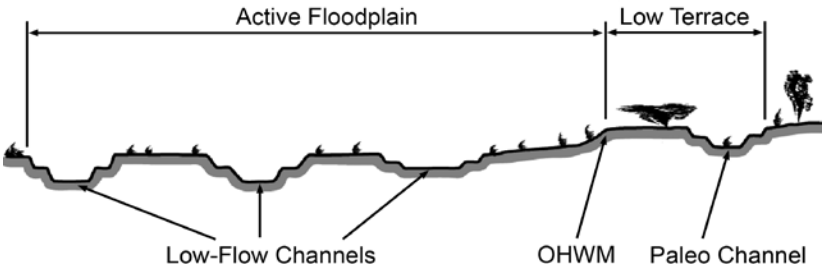
Potential anthropogenic influences on the channel system:
Feature appears to be created due to stormwater runoff from electrical transmission line tower located onsite.

Brief site description:
Study Area is within an active natural gas compresor station operated by SoCalGas

Checklist of resources (if available):

- ☑ Aerial photography
  Dates: 2019
- ☑ 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: **Cross section ID:** **Date:** **Time:**

Cross section drawing:

OHWM

GPS point: 34.4434, -118.5893

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☑ Change in vegetation cover
- ☑ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:
Small ephemeral drainage capturing stormwater runoff from powerline transmission tower.

Floodplain unit: ☑ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: 34.4434, -118.5893

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: 70 % Tree: 0 % Shrub: 0 % Herb: 70 %

Community successional stage:

- ☐ NA
- ☑ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☑ Drift and/or debris
- ☑ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☑ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Honor Rancho Compressor Modernization
Project Number:
Stream: Ephemeral C
Investigator(s): J. Caskey
Date: 5/25/22 **Time:** 0830
Town: Castaic **State:** CA
Photo begin file#: **Photo end file#:**
Site photos are in Appendix B.

Y ☑ / N ☐ Do normal circumstances exist on the site?

Y ☑ / N ☐ Is the site significantly disturbed?

Location Details:
Honor Rancho Compressor Station

Projection: **Datum:**
Coordinates: 34.449124, -118.597923

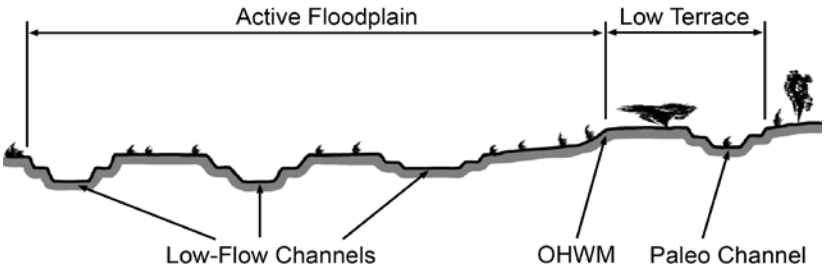
Potential anthropogenic influences on the channel system:
Feature appears to be created from runoff from an existing v-ditch installed in the hillside.

Brief site description:
Study Area is within an active natural gas compresor station operated by SoCalGas

Checklist of resources (if available):

- ☑ Aerial photography
  Dates: 2019
- ☑ 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

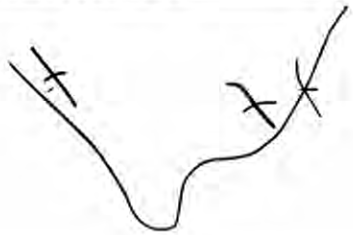


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

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: **Cross section ID:** **Date:** **Time:**

Cross section drawing:



OHWM

GPS point: _____

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☑ Change in vegetation cover
- ☐ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:
Small ephemeral drainage capturing stormawater runoff from access road.

Floodplain unit: ☑ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: 34.4491, -118.5979

Characteristics of the floodplain unit:

Average sediment texture: _____
Total veg cover: 40 % Tree: _____% Shrub: _____% Herb: _____%
Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☑ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☑ Drift and/or debris
- ☑ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☑ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: Honor Rancho Compressor Modernization **Date:** 6/23/22 **Time:** 0700
Project Number: **Town:** Castaic **State:** CA
Stream: Ephemeral D **Photo begin file#:** **Photo end file#:**
Investigator(s): J. Caskey Site photos are in Appendix B.

Y ☑ / N ☐ Do normal circumstances exist on the site?

Y ☑ / N ☐ Is the site significantly disturbed?

Location Details:
Honor Rancho Compressor Station

Projection: **Datum:**
Coordinates: 34.4441, -118.58344

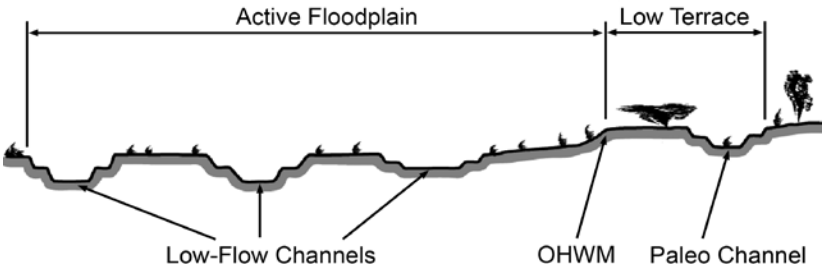
Potential anthropogenic influences on the channel system:
Feature appears to be created from runoff from an existing access road

Brief site description:
Study Area is within an active natural gas compresor station operated by SoCalGas

Checklist of resources (if available):

- ☑ Aerial photography
  Dates: 2019
- ☑ 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

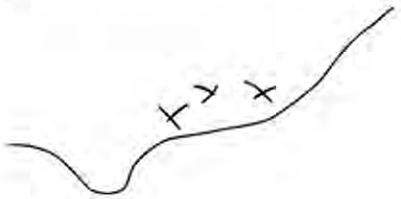


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

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: **Cross section ID:** **Date:** **Time:**

Cross section drawing:



OHWM

GPS point: _____

Indicators:

- ☐ Change in average sediment texture
- ☐ Change in vegetation species
- ☑ Change in vegetation cover
- ☐ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:
Small ephemeral drainage capturing stormawater runoff from access road.

Floodplain unit: ☑ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: 34.4441, -118.5834

Characteristics of the floodplain unit:

Average sediment texture: _____
Total veg cover: 60 % Tree: _____% Shrub: _____% Herb: 60 %
Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☑ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☑ Drift and/or debris
- ☑ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☑ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments: