

**Public Review Draft
CEQA INITIAL STUDY
PROPOSED MITIGATED NEGATIVE DECLARATION**

**MODJESKA CANYON ROAD BRIDGE (No. 55C-0172) REPLACEMENT
PROJECT
INITIAL STUDY NO. IP 22-0017**

Prepared for:



**Orange County
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Chapter 1: Introduction

The purpose of this Initial Study is to evaluate the potentially significant environmental impacts associated with implementing the proposed Project. The Initial Study is organized into the following chapters:

- Chapter 1: Introduction
- Chapter 2: Environmental Determination
- Chapter 3: Project Description
- Chapter 4: Environmental Evaluation
- Chapter 5: Summary of Mitigation Measures and Project Design Features
- Chapter 6: References

1.1 Project Title

Modjeska Canyon Road Bridge (No. 55C-0172) Replacement Project

1.2 Lead Agency Name | Address

Orange County Public Works/OC Infrastructure Programs
601 N. Ross Street
Santa Ana, CA 92701

1.3 Lead Agency Contact Person | Telephone Number | Email

Sam Tieu, PE
Civil Engineer
OC Public Works/OC Infrastructure Programs
Telephone: (714) 647-3968
Email: Sam.Tieu@ocpw.ocgov.com

1.4 Project Location

The Modjeska Canyon Road Bridge Project is located on Modjeska Canyon Road where the road crosses Santiago Creek. Refer to Figure 1: Project Vicinity, Figure 2: Project Location, Figure 3: Project Features, and Figure 4: Site Photos below for Project context.

1.5 Project Sponsor's Name | Address

Orange County Public Works/OC Infrastructure Programs
601 N. Ross Street, Santa Ana, CA 92701

1.6 General Plan | Specific Plan Designation(s)

The land use designations at and near the Project site are Rural Residential (0.25 – 0.5 Dwelling Units (DU)/Acre) and Suburban Residential (0.5 – 18 DU/Acre) (County of Orange, 2015). The land use designations at and near the Project site in the Silverado- Modjeska Specific Plan are Rural Residential (1 DU/ 4 acre) and low density residential (1DU/acre) (County of Orange 1977).

1.7 Zoning District(s)

The Land Use Designation at and near the Project is 1A Rural Residential with 0.025 – 0.5 Dwelling Units (DU) per acre and 1B Suburban Residential with 0.5 – 18 DU per acre.

1.8 Description of Project

Orange County Public Works, in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the Modjeska Bridge (Bridge No. 55C-0172) over Santiago Creek. The Modjeska Bridge is located in Modjeska Canyon near the Cleveland National Forest. The existing bridge is a single span and crosses over Santiago Creek. The Project will replace the existing substandard steel bridge; a portion of the construction funding is provided by the Highway Bridge Program (HBP).

The proposed replacement structure is a 65'-2" long and 43'-10" wide single span prestressed, precast concrete I girder bridge. The bridge will be raised approximately one foot to increase hydraulic conveyance. Tall abutment walls, similar to the existing condition, will be set on spread footing foundations. Tall wing walls will be required at all corners. The replacement bridge will have 12-foot-wide lanes and will include 8-foot minimum width shoulders. Bridge barriers will be deck mounted concrete barrier Type 836.

There are no nearby pedestrian facilities or future plans to place sidewalks along Modjeska Canyon Road. To keep with the rural setting, there will not be sidewalks on the bridge. The bridge is on a 155' horizontal curve. The precast girder construction limits the radius the outside edge of the bridge can be curved. Therefore, the shoulders will vary from 8 feet up to 10.8 feet, for a minimum total barrier to barrier width of 43'-10". The bridge will be wider at the north end to accommodate vehicles turning off the bridge onto Markuson Road to the east.

Santiago Creek is an intermittent stream that flows west under the existing bridge. The location of the stream is well defined and is currently not adjacent to the abutments during low flows. Construction will likely occur when the stream is dry and not require stream diversion. A drainage ditch runs along the southwest approach. The wider bridge may require the ditch to be realigned, and trees at bridge corners will need to be removed. The ditch will be moved slightly west in the immediate vicinity of the bridge and will quickly transition back to its current location south of the bridge.

The narrow road and limited extent of existing right of way requires the replacement structure be placed in the same location as the existing structure. There is a detour approximately 4 miles in length but includes a steep winding road on Modjeska Grade Road. Because of the steep, winding nature of the Modjeska Grade detour and the desire to provide suitable emergency ingress and egress, the new bridge will be stage constructed to allow one lane of alternating traffic during construction. The alternating one-way traffic will be controlled by signal.

During the first stage, a temporary bridge approximately 80 feet long will be placed within the footprint of the new bridge, reducing environmental and right of way impacts to the same as needed for only the new bridge. The temporary bridge will contain both directions of travel on one lane, utilizing a temporary traffic signal, while the existing bridge is removed for the second construction stage, one lane of alternating traffic is shifted to the new bridge, the temporary bridge is removed, and the remaining half of the new bridge is constructed.

Contractor staging areas are anticipated to be situated on the closed portion of the existing road approaches and potentially on property just west of the north abutment. Temporary easements and partial parcel acquisition will be necessary but are anticipated to be minimal. Exact amounts will be determined during final design.

Utilities include a waterline attached to the west side of the bridge and overhead electrical and communication lines just to the north of the north abutment. The overhead lines will not need to be relocated for construction. The waterline will need to be relocated to the new bridge.

Typical equipment for roadway construction would include heavy construction earthmoving equipment, dump trucks and pavers. Typical bridge construction equipment would include cranes, excavators, rock hammers, generators, and concrete pumps.

Refer to Section 3, Project Description, for a comprehensive discussion of the proposed project.

1.9 Surrounding Land Uses and Setting

The Project is adjacent to the Cleveland National Forest and the unincorporated portions of Orange County. The land use designations at and near the Project site are Rural Residential and Suburban Residential as defined by the Orange County General Plan.

1.10 Other public agencies whose approval is required

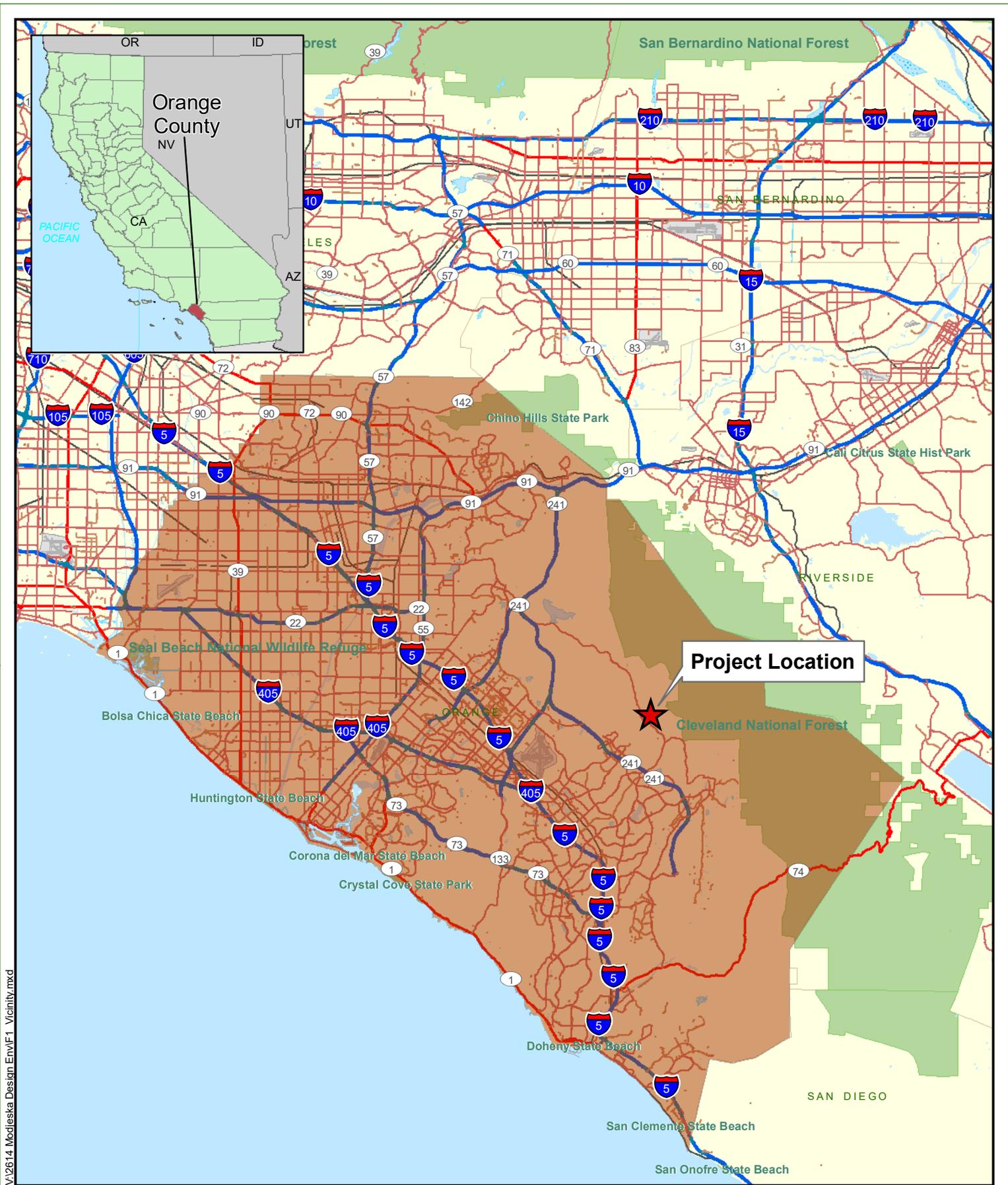
Table 1 below provides a list of required and anticipated public agency approvals that are associated with the Project.

Table 1: Public Agency Approvals

Body	Action
Orange County Board of Supervisors	Adoption of the California Environmental Quality Act (CEQA) Final Initial Study with Mitigated Negative Declaration (IS/MND)
Caltrans District 12	National Environmental Policy Act (NEPA) Categorical Exclusion (CE)
California Department of Fish & Wildlife (CDFW)	Section 1602 Streambed Alteration Agreement
Santa Ana Regional Water Quality Control Board (RWQCB)	Section 401 Water Quality Certification
U.S. Army Corps of Engineers (USACE)	Section 404 Nationwide Permit Authorization

1.11 California Native American consultation

Pursuant to Public Resources Code section 21080.3.1, Orange County initiated consultation per Assembly Bill 52 on July 8, 2021 with the following California Native American tribes: Juaneño Band of Mission Indians, San Gabriel Band of Mission Indians, Soboba Band of Luiseño Indians, and Gabrieleño Band of Mission Indians - Kizh Nation.

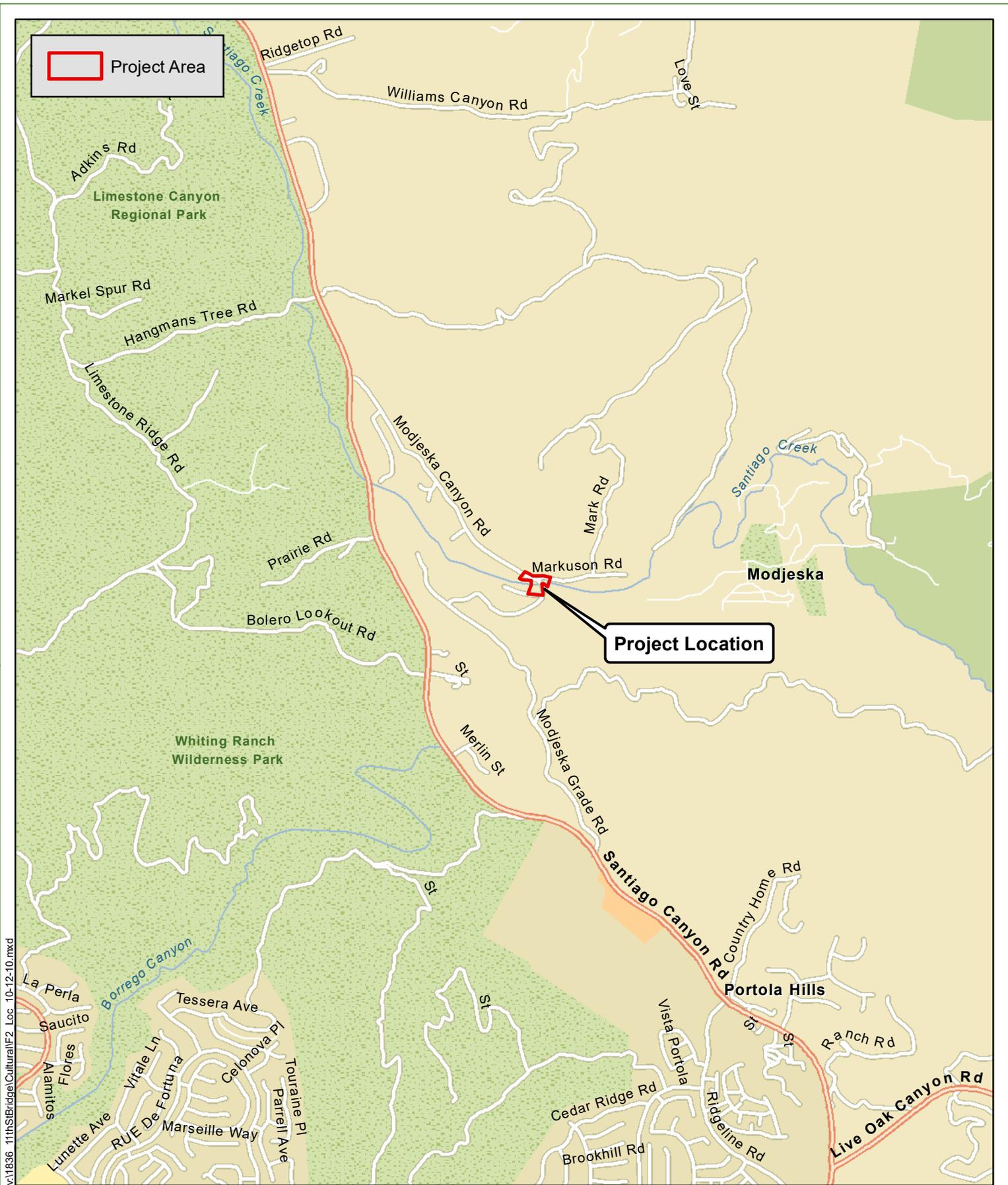


Source: ESRI 2008; Dokken Engineering 9/20/2019; Created By: briannm

FIGURE 1
Project Vicinity

BRLO-5955(094)
 Modjeska Canyon Road Bridge Replacement Project
 Modjeska Canyon, Orange County, California

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Source: ESRI World Street Maps Online; Dokken Engineering 9/20/2019; Created By: brianm

FIGURE 2

Project Location

BRLO-5955(094)

Modjeska Canyon Road Bridge Replacement Project
 Modjeska Canyon, Orange County, California

 Project Area
 Potential Staging Area
Project Features
 Bridge
 Edge of Pavement
 Bridge Footings
 Grading Limits



\\1836 - 11th\SI\Bridges\Cultural\F2_Loc_10-12-10.mxd

Source: ESRI World Street Maps Online; Dokken Engineering 4/24/2020; Created By: hsheldon



1 inch = 100 feet

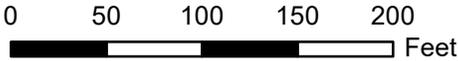


FIGURE 3
Project Features

BRLO-5955(094)
Modjeska Canyon Road Bridge Replacement Project
Modjeska Canyon, Orange County, California

Figure 4: Site Photos



Facing south



Facing northeast



Facing east (upstream)



Facing west (downstream)

Chapter 2: Environmental Determination

Based on the analysis conducted in this Initial Study, Orange County, OC Public Works, as the Lead Agency, has made the following determination:

Table 2: Environmental Determination

<p>I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.</p>	<input type="checkbox"/>
<p>I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.</p>	<input checked="" type="checkbox"/>
<p>I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.</p>	<input type="checkbox"/>
<p>I find that the proposed Project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.</p>	<input type="checkbox"/>
<p>I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.</p>	<input type="checkbox"/>
<p>I find that the proposed Project has previously been analyzed as part of an earlier CEQA document (which either mitigated the Project or adopted impacts pursuant to findings) adopted/certified pursuant to the State CEQA Guidelines and the County’s adopted Local CEQA Guidelines. The proposed Project is a component of the whole action analyzed in the previously adopted/certified CEQA document.</p>	<input type="checkbox"/>
<p>I find that the proposed Project has previously been analyzed as part of an earlier CEQA document (which either mitigated the Project or adopted impacts pursuant to findings) adopted/certified pursuant to State and County CEQA Guidelines. Minor additions and/or clarifications are needed to make the previous documentation adequate to cover the Project which are documented in this addendum to the earlier CEQA document (CEQA §15164).</p>	<input type="checkbox"/>
<p>I find that the proposed Project Has previously been analyzed as part of an earlier CEQA document (which either mitigated the Project or adopted impacts pursuant to findings) adopted/certified pursuant to State and County CEQA Guidelines. However, there is important new information and/or substantial changes have occurred requiring the preparation of an additional CEQA document (ND or EIR) pursuant to CEQA Guidelines Sections 15162 through 15163.</p>	<input type="checkbox"/>

Joe Nguyen, PE, PMP
Signature

01/27/2022
Date

Joe Nguyen, PE, PMP
Printed Name

Chapter 3: Project Description

3.1 Introduction

Purpose

The purpose of the Project is to replace the existing deteriorated steel bridge with a new bridge in conformance with current environmental and design standards and to provide a useful life expectancy of 75 years minimum. Portions of the roadway connecting to the bridge will require widening and re-profiling to provide for a smooth transition to the new bridge.

Need

This road is the main access for residents of Modjeska Canyon; therefore, it is critical to keep it in service and avoid potential deficiencies that would take the bridge out of service. Seasonal floods and wildfires occur in the Santa Ana Mountains that affect this community and quick access from the Canyon is necessary during such events.

The existing 2-lane bridge was classified as functionally obsolete through Caltrans Bridge Inspection Report on May 10, 2018 due to the very narrow road width. The bridge must be widened to meet current standards and traffic volumes.

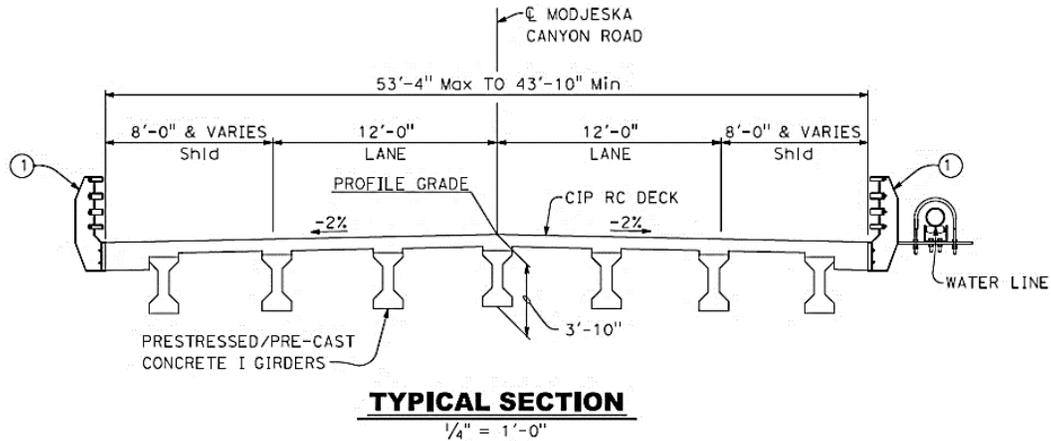
The bridge live load capacity does not meet current American Association of State Highway and Transportation Officials (AASHTO) standards due to structural deficiencies. The soffit has several spalls with exposed and rusted rebar; the total defected area was estimated to be 15 feet long and 1 foot wide. Pitted rust is at the bottom flange of the main exterior girder and the bottom flange and web of the floor beams are rusted in many locations. In addition, the non-redundant riveted steel through girders and riveted steel floor beams require the bridge to undergo biennial inspection per the Caltrans Fracture Critical Member Inspection Plan. Replacing the bridge will eliminate the intensive bridge inspection maintenance efforts and cost.

A new bridge structure is needed to provide a facility that will meet current federal standards.

Project Description

Orange County Public Works, in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the Modjeska Bridge (Bridge No. 55C0172) over Santiago Creek. The Modjeska Bridge is located in Modjeska Canyon near the Cleveland National Forest. The existing bridge is a single span and crosses over Santiago Creek. The Project will replace the existing substandard steel bridge; a portion of construction funding is provided by the Highway Bridge Program (HBP).

Temporary construction easements (TCE) and acquisitions will affect several parcels in the Project area. Total TCEs are approximately 0.08 of an acre and approximately 0.086 of an acre of permanent acquisitions. The figure below is a cross section of the proposed bridge (the '1' in the circle indicates post and beam bridge railing).



3.2 Environmental Setting and Surrounding Land Uses

The surrounding land uses are described in the following table.

Table 3: Surrounding Land Uses

Direction	Land Use(s)
North	Rural Residential and Open Space
East	Cleveland National Forest
West	Rural Residential and Open Space
South	Rural Residential

Source: County of Orange, General Plan Land Use Element Map - 2015.

Project Site Environmental Setting

Modjeska Bridge is located in the eastern part of Orange County near the Cleveland National Forest. Santiago Creek is an intermittent creek that flows under the bridge with western sycamore, the occasional white alder, and smaller vegetation along the stream. The average elevation of the Project area is 1,272 feet (ft) above mean sea level and is sloped moderately to the southwest. See Figure 1: Project Vicinity, Figure 2: Project Location, Figure 3: Project Features, and Figure 4: Site Photos above.

Site Vicinity Environmental Setting

Modjeska Canyon is on the western slope of the Santa Ana Mountains with several hundred residents within the canyon. The elevation rises to the north and east within the Cleveland National Forest that surrounds the canyon. Modjeska Canyon is also bordered by foothills to the west and south with the Pacific Ocean over 15 miles away in the distance. The Project site is located within marine sedimentary and metasedimentary rocks, described as Upper Cretaceous sandstone, shale, and conglomerate (Ku). The subsurface conditions encountered at the Project site consist of a mixture of coarse-grained soils, sands, and mostly silty clay from the Riverwash, Cieneba, and Sorrento series. These soils extend approximately 6 feet below the ground surface.

Site Regional Environmental Setting

The Project is in the Peninsular Ranges Geomorphic Province, which is a group of mountain ranges that run from southern California to the southern tip of the Baja California peninsula. This province is characterized by a series of ranges separated by longitudinal valleys, trending northwest to southeast,

subparallel to faults branching from the San Andreas Fault. The trend of topography is similar to the Coast Ranges, but the geology is similar to that of the Sierra Nevada with granitic rock intruding the older metamorphic rocks. The Peninsular Ranges (PR) extend into lower California and are bound on the east by the Colorado Desert Geomorphic Province and the Transverse Ranges to the north. The Los Angeles Basin and the island group (Santa Catalina, Santa Barbara, and the distinctly terraced San Clemente and San Nicolas islands), together with the surrounding continental shelf (cut by deep submarine fault troughs), are included in this province (CGS, 2002).

3.3 Construction Activities

The recommended proposed replacement structure is a 65'-2" long single span prestressed, precast concrete I-Girder bridge. The bridge will be raised approximately one foot to increase hydraulic conveyance. Raising the bridge higher will begin to impact the Markuson Road intersection and the residential driveway southeast of the bridge. The abutments, similar to the existing bridge, will be set on spread footing foundations. Bridge barriers will be side mounted open metal railing, Type ST-70SM.

The replacement bridge will have 12-foot-wide lanes with minimum 8-foot shoulders. The proposed road alignment is curved which varies the width of the shoulders, for a minimum total barrier to barrier width of 43'-10" as shown in the image below. There are no nearby pedestrian facilities or future plans to place sidewalks along Modjeska Canyon Road, but portions of Modjeska Canyon Road have sufficient dirt shoulders to provide room for pedestrians. To keep with the rural setting there will not be sidewalks on the bridge.

The new bridge will be stage constructed to maintain a single lane of alternating traffic through the site during construction. The first stage of construction consists of the installation of a temporary bridge that will be placed adjacent to the existing bridge and within the footprint of the new wider bridge. The temporary bridge will contain both directions of travel on one lane. A temporary traffic signal system with one portable traffic signal on a trailer will be used for traffic control. As the staged construction progresses the trailer will be moved to account for the changing traffic lanes. The temporary traffic signal will be used to control traffic for approximately 7 – 8 months.

The existing bridge and bridge abutments will be removed. Heavy equipment consisting of an excavator with a jackhammer attachment will need to enter the creek invert in order to chip away the existing concrete abutments although some of the removal of the concrete abutments can be accomplished with an excavator working from the roadway outside of Waters of the United States (WOUS) and Waters of California. Then the new concrete abutments will be formed and cast in place. The new abutments will be cast in the same footprint as the existing abutments. After the concrete abutments have cured, the one-half of the precast bridge structure will be installed by a crane.

The second stage of construction consists of shifting both directions of travel onto the newly constructed one-half of the bridge width. A temporary traffic signal system will be used to control traffic for one lane of alternating direction of travel on the new bridge. Then, the temporary bridge will be removed. Then, the second half of the bridge abutments will be formed and cast in place. After the concrete abutments have cured, the final one-half of the precast bridge structure will be installed by a crane. Then west bound traffic will be shifted to the newly constructed portion of the bridge and the project will be complete.

One residential driveway southeast of the bridge will be impacted. The residence driveway immediately southeast of the bridge and Markuson Road, northwest of the bridge, will need to be modified to accommodate the new road grade. A crash cushion will be placed at the southeast end of the bridge

barrier. Due to the limited space for driveway access, a QuadGuard crash cushion, which meets 20 mph design speed and is only 9 feet long, will be used.

Much of the existing bridge is currently within private property with the roadway approaches on each side of the bridge on public property. Temporary construction easements of 0.08 of an acre will be required for on-site staging.

Overhead utilities and underground waterlines are located along the existing road alignment north of the existing bridge. The overhead utilities branch off to Markuson Road about 100-ft west of the Modjeska Canyon Road and Markuson Road intersection. The overhead utilities continue over the Modjeska Canyon Road and Markuson Road intersection as well as jump over Santiago Creek roughly 100-ft west of the existing bridge. The preliminary road alignment is not in conflict with existing utility poles. The underground waterline attached to the west side of the bridge will need to be relocated and reattached to the new bridge.

3.4 Site Improvement Characteristics

- Figure 5 below provides the bridge dimensions and construction stages.

The replacement bridge will utilize a side mounted open railing system, the California ST-70SM railing, to give the replacement bridge a rustic and open feel reminiscent of the existing bridge. For the rural setting with low traffic and exposure to the public, no bridge lighting or landscaping (other than re vegetation) is anticipated.

3.5 Building Characteristics

The new profile will raise the road by approximately 1-foot in order to clear the 100-year storm event. The proposed vertical alignment places the bridge on a 150' vertical curve, with approximately 3.5% approach grades. To meet the 20 mile per hour (mph) design speed, the north approach is 87-feet long and the south approach is 99- feet. The northbound and southbound bridge approaches are on a 155-foot radius curve. Since the bridge is a precast concrete I-Girder bridge the girders cannot be curved. Therefore, the deck will be parallel to the girders and the 8-foot shoulders will vary slightly to accommodate the curve. Guardrail will be placed along the southbound approach; transitioning to a bridge barrier attached to the west side of the bridge.

3.6 Infrastructure Characteristics

As described in the Draft Report Hydrologic and Hydraulic Basis of Design dated January 2019, the Project is being analyzed using the 100-year Expected Value (EV) of the Santiago Creek at the Project site. Hydraulic modeling performed by Michael Baker International revealed that the existing bridge has enough capacity to pass the 100-year EV. As stated in the Draft Report the OCFCD Design manual minimum freeboard criteria is 1.5 feet above the 100-year water surface elevation for non-leveed channels. The existing bridge soffit elevation is 1272.22 and the 100-year water surface elevation based on the draft report is 1270.31 feet. Therefore, the freeboard meets the 1.5



ft freeboard requirement with a 1.91 ft of freeboard. The preliminary hydraulics for the existing structure are summarized in **Table 4** below.

Table 4: Modjeska Canyon Road Bridge Hydraulics Summary

	100-Year EV	200-Year EV	500-Year EV
Water Surface Elevation	1270.31 ft	1271.29 ft	1274.88 ft

Open bridge rails are anticipated, which will allow surface runoff to flow off the sides of the bridge. Currently surface runoff is collected as it flows along the existing curb and discharges into the creek by overside drains immediately beyond the existing curb. Existing drainage patterns will be maintained along the approach roadway.

Overhead utilities and underground waterlines are located along the existing road alignment north of the existing bridge. The overhead utilities branch off to Markuson Road about 100-ft west of the Modjeska Canyon Road and Markuson Road intersection. The overhead utilities continue over the Modjeska Canyon Road and Markuson Road intersection as well as jump over Santiago Creek roughly 100-ft west of the existing bridge. The preliminary road alignment is not in conflict with existing utility poles. The underground waterline attached to the west side of the bridge will need to be relocated and reattached to the new bridge.

There is an existing gauge station at the northeast corner of the bridge. The existing gauge station appears to be operational and still transmitting data to the OC Public Works website www.ocwatersheds.com. The OC Public Works website displays rain fall data along with water surface elevations. Therefore, the existing gauge station and electrical feed will need to be removed with construction of the new bridge. A new gauge station will be installed on the same side of the creek approximately 40 feet east of the current location with exact placement determined during final design.

3.7 Project Design Features

Design of the bridge superstructure, abutments, and foundations will be in conformance with American Association of State Highway and Transportation Officials (AASHTO) Load and Resistance Factor Design (LRFD) Bridge Design Specifications (Customary U.S. Units 8th Edition 2017) with Interims and Caltrans Amendments. The seismic analysis will be based on Caltrans Seismic Design Criteria (April 2019, Version 2.0).

3.8 Offsite Improvements

No offsite improvements will be necessary to complete the Project.

3.9 Project Schedule and Phases

Overall construction is anticipated to take 8 months and estimated to begin in 2023. The new bridge will be constructed in phases with a temporary bridge placed within the footprint of the new bridge. The construction sequence will be as follows.

1. Construct supports for temporary bridge while existing bridge is in service. This may require traffic to be restricted to one alternating lane.
2. Close road and remove existing bridge in one day.

3. Erect temporary bridge in one day. Restore traffic within approximately 56 hours of road closure. The closure can be performed over a weekend to minimize commute and school traffic interruptions.
4. Construct a portion of the new bridge wide enough to support one lane of alternating traffic.
5. Shift traffic to new bridge and remove temporary bridge.
6. Construct remaining width of new bridge.

3.10 Change in Land Use Controls

Existing land use and zoning in and around the Project area will remain the same.

3.11 Related Projects

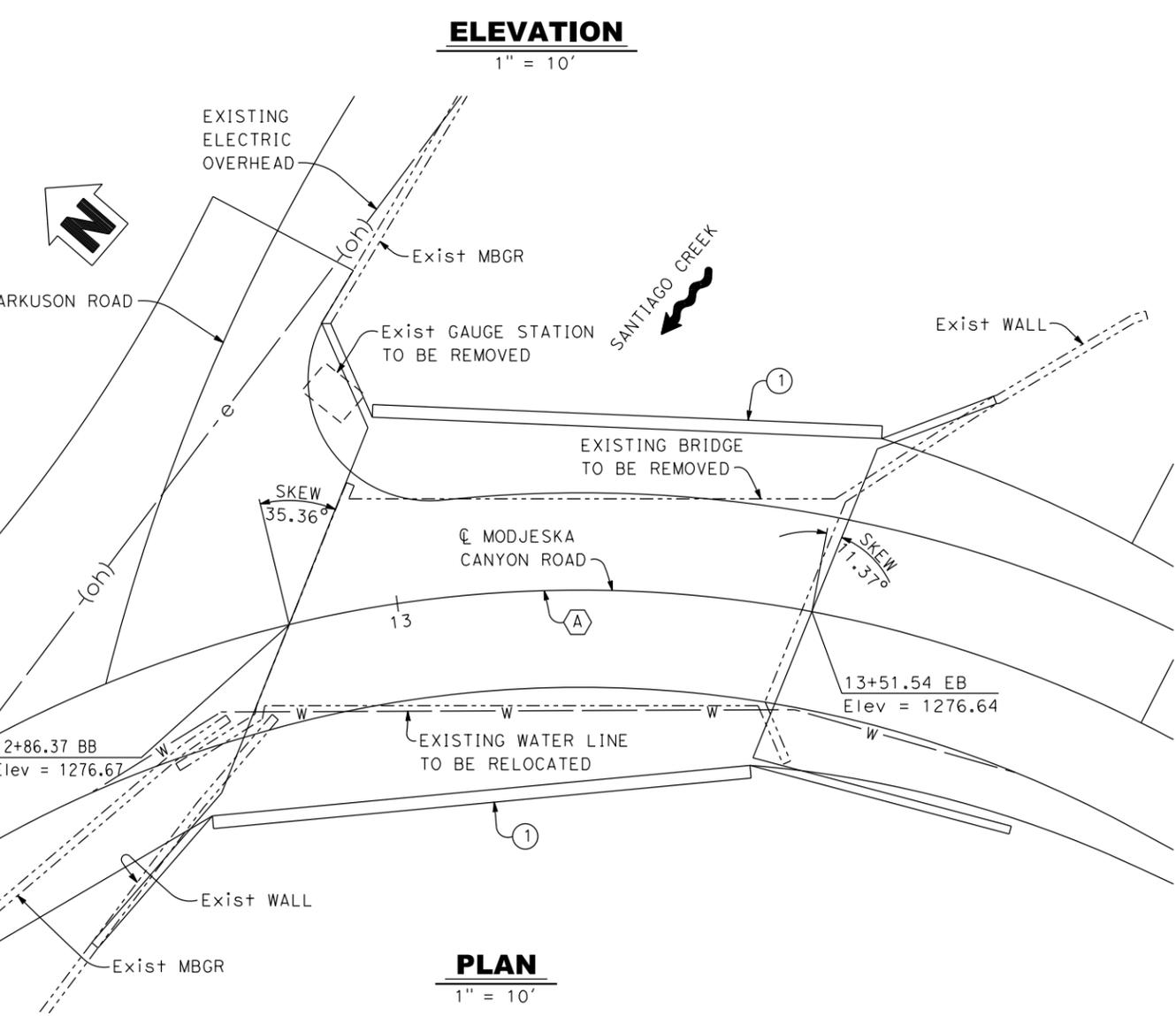
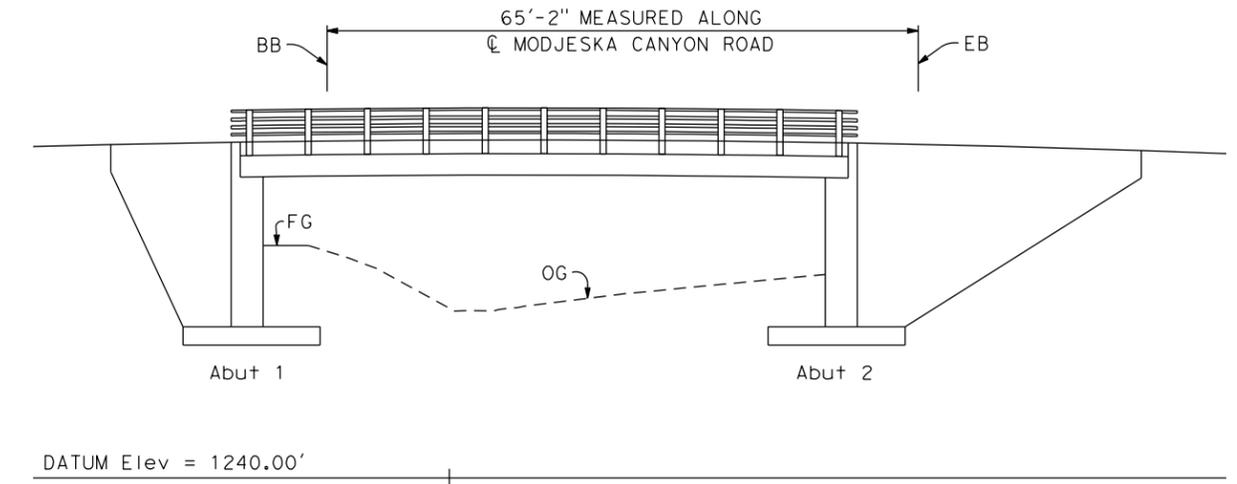
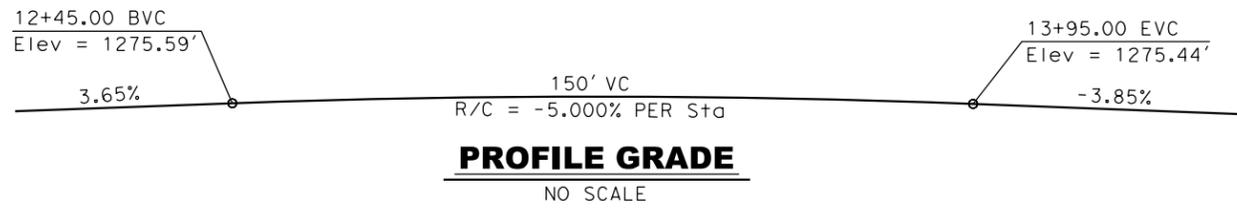
There are three other bridges north and northeast of the Project on Silverado Canyon Road; 55C-0177 and 55C-0174 are in the process of environmental documentation and clearance and 55C-0175 has acquired Project approval and environmental clearance.

Table 5: Related Projects

Map ID	Project Name	Land Use	Statistical Data	Status
	Silverado Canyon Road Bridge 55C-0177	Suburban and Rural Residential	Replacement over Silverado Creek due to structural deficiency	In the process of acquiring PA&ED Anticipated construction 2023
	Silverado Canyon Road Bridge 55C-0174	Suburban and Rural Residential	Replacement over Silverado Canyon Creek due to structural deficiency	In the process of acquiring PA&ED Anticipated construction 2023
	Silverado Canyon Road Bridge 55C-0175	Suburban and Rural Residential	Replacement over Ladd Creek due to structural deficiency	PA&ED acquired Anticipated construction 2022

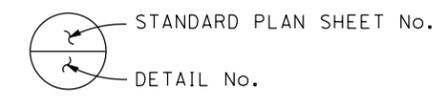
Source: OC Public Works, Development Services/Planning (2021).

Figure 5: Site Plan



STANDARD PLANS DATED 2018

Sheet No.	Title
A3A	ABBREVIATIONS (SHEET 1 OF 3)
A3B	ABBREVIATIONS (SHEET 2 OF 3)
A3C	ABBREVIATIONS (SHEET 3 OF 3)
A10A	LEGEND - LINES AND SYMBOLS (SHEET 1 OF 5)
A10B	LEGEND - LINES AND SYMBOLS (SHEET 2 OF 5)
A10C	LEGEND - LINES AND SYMBOLS (SHEET 3 OF 5)
A10D	LEGEND - LINES AND SYMBOLS (SHEET 4 OF 5)
A10E	LEGEND - LINES AND SYMBOLS (SHEET 5 OF 5)
A10F	LEGEND - SOIL (SHEET 1 OF 2)
A10G	LEGEND - SOIL (SHEET 2 OF 2)
A10H	LEGEND - ROCK
A62C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL BRIDGE
B0-1	BRIDGE DETAILS
B0-3	BRIDGE DETAILS



INDEX TO PLANS

Sheet No.	Title
1	GENERAL PLAN
2	DECK CONTOUR
3	FOUNDATION PLAN

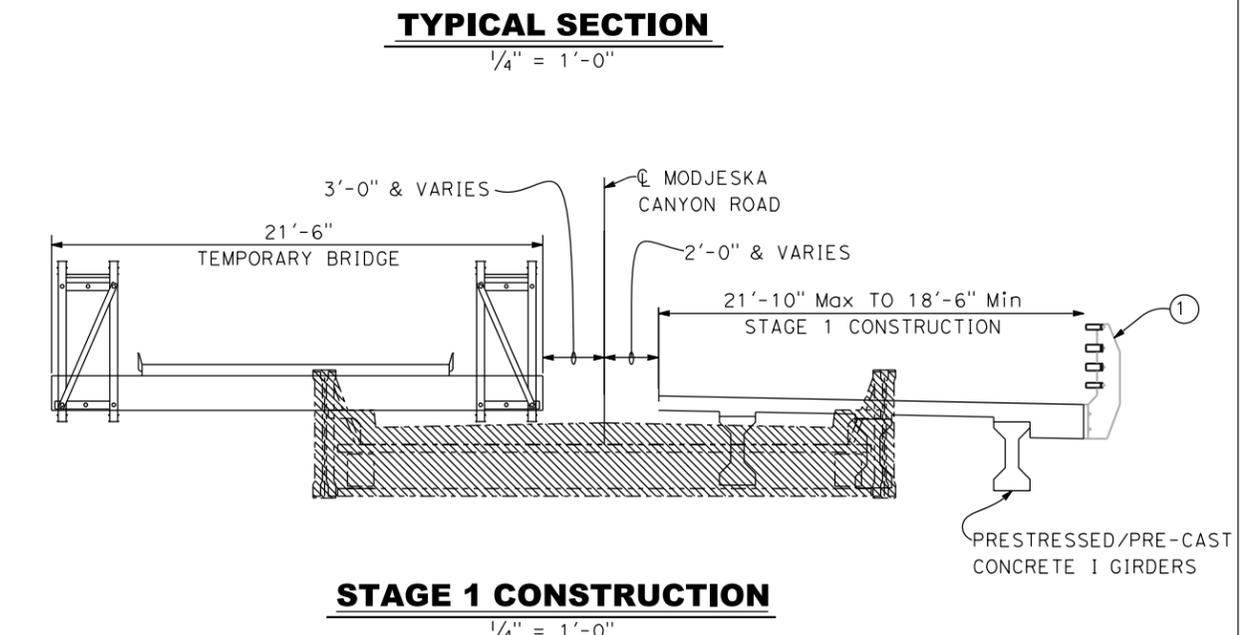
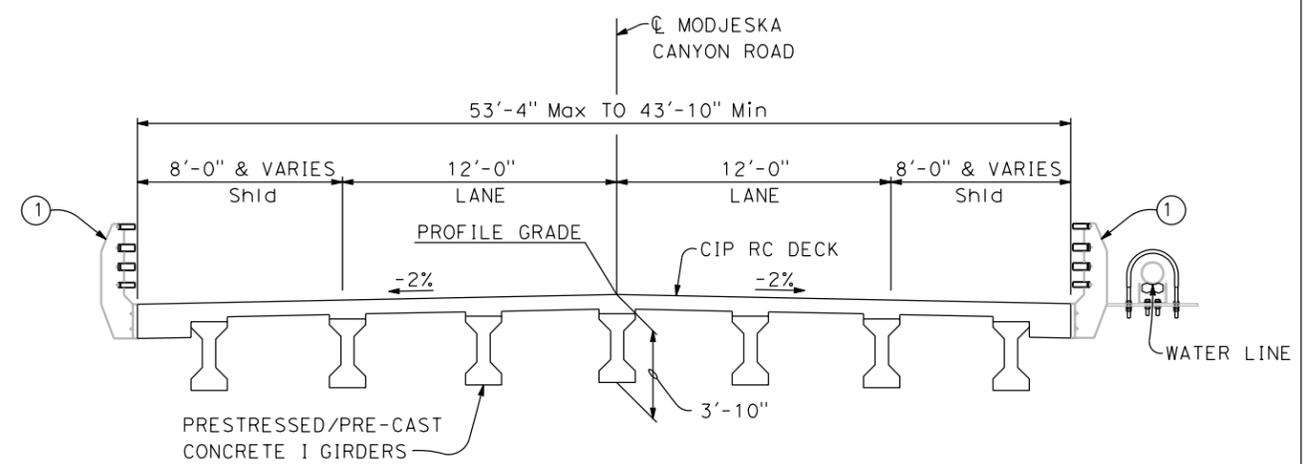


MARK	DESCRIPTION	DATE	APPR.

PREPARED UNDER THE RESPONSIBLE CHARGE OF:

DE DOKKEN ENGINEERING
 110 BLUE RAVINE ROAD, SUITE 200
 FOLSOM, CA 95630
 TEL: 916 858-0642
 FAX: 916 858-0640

DATE: 12-3-2018



CURVE DATA

R	= 155.00'
Δ	= 65°54'37"
T	= 100.49'
L	= 178.30'

- LEGEND**
- ① CALIFORNIA ST-70SM BARRIER
 - ▨ Denotes remove exist bridge
 - Denotes existing structure

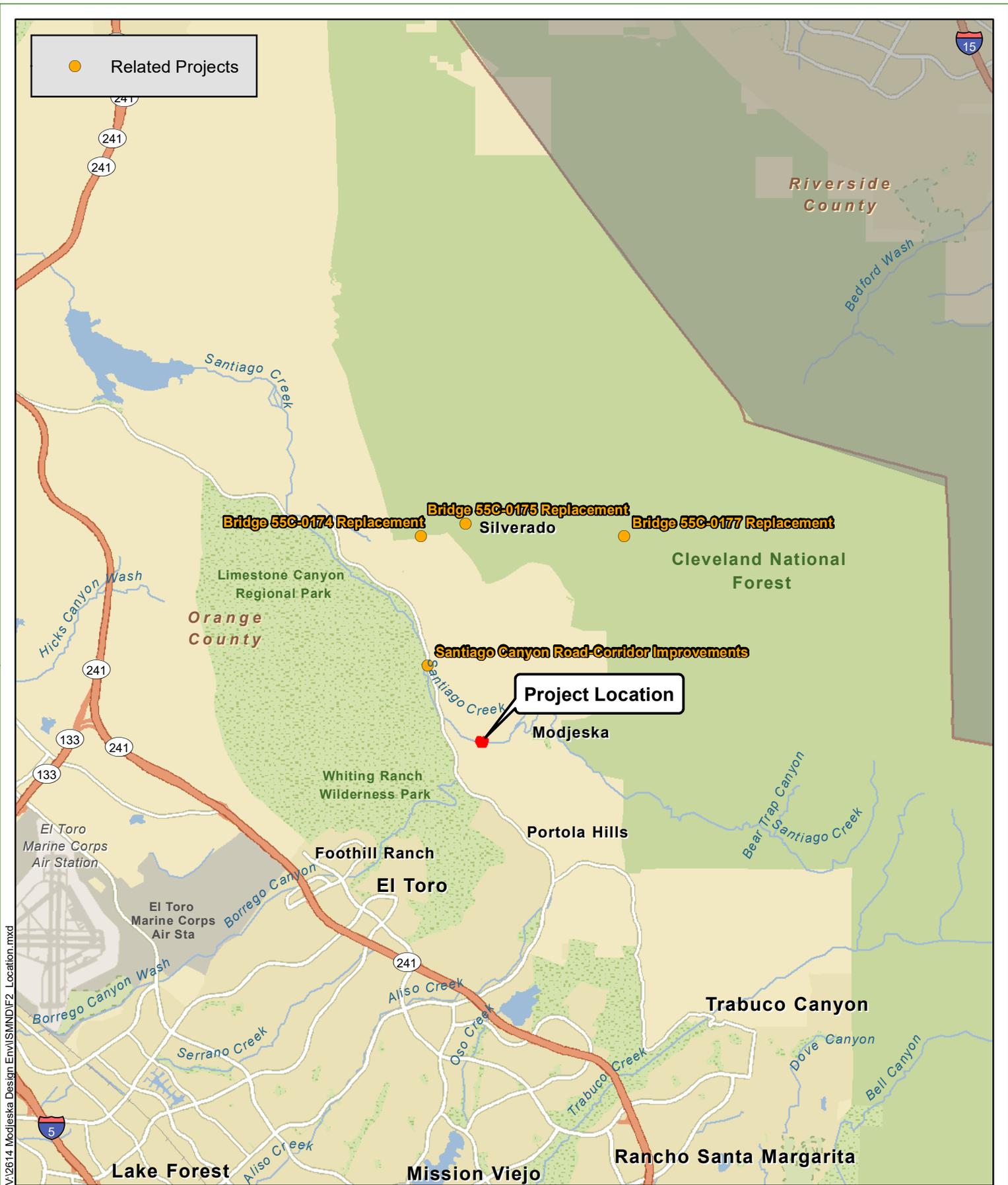
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 CHECKED BY: [blank]
 DRAWN BY: ANTHONY DANG
 DRAWING NUMBER: [blank]
 FILE NAME: [blank]
 PLOT DATE: AUGUST 13, 2018
 SCALE: 1:1 (0 SHEET)

County of Orange
 Public Works

PREPARED BY: **DE DOKKEN ENGINEERING**
 110 BLUE RAVINE ROAD, SUITE 200
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MODJESKA CANYON ROAD BRIDGE OVER SANTIAGO CREEK PROJECT

GENERAL PLAN



V:\2614 Modjeska Design\Env\ISMND\F2_Location.mxd

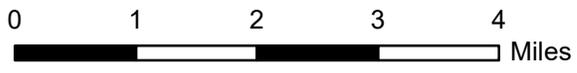
Source: ESRI World Street Maps Online; Dokken Engineering 7/14/2021; Created By: ahale

FIGURE 6

Related Projects

BRLO-5955(094)

Modjeska Canyon Road Bridge Replacement Project
Modjeska Canyon, Orange County, California



Chapter 4: Environmental Evaluation

4.1 Analysis Methodology

Analysis of potentially significant impacts of each of the environmental factors identified in Table 6 below is based on the Project site environmental setting, Project description, and the sample questions/thresholds of significance. Potentially significant impacts that are reduced below the level of significance by sample questions/thresholds of significance will detail how the potentially significant impact is reduced. Potentially significant impacts that are unable to be reduced below the level of significance will detail the various mitigation options applied and why none would reduce the impact.

The analysis will consider the whole of the actions and include the following:

- Onsite impacts
- Offsite impacts
- Short-term construction impacts
- Long-term operational impacts
- Direct impacts
- Indirect impacts
- Cumulative impacts

4.2 Environmental Factors Potentially Affected

This document incorporates the Environmental Checklist Form from Appendix G of the 2021 CEQA Guidelines as referenced in Section 3.3 of the Orange County 2020 Local CEQA Procedures Manual.

Table 6 below lists the environmental factors that are evaluated in this document. Environmental factors that are checked contain at least one impact has been determined to be a “Potentially Significant Impact.” Environmental factors unchecked indicate that impacts were determined to have resulted in no impacts, less than significant impacts, or less than significant impacts with mitigation measures or County Standard Conditions of Approval incorporated into the Project.

Table 6: Environmental Factors Potentially Affected

<input type="checkbox"/> Aesthetics (4.5)	<input type="checkbox"/> Mineral Resources (4.16)
<input type="checkbox"/> Agriculture & Forestry Resources (4.6)	<input type="checkbox"/> Noise (4.17)
<input type="checkbox"/> Air Quality (4.7)	<input type="checkbox"/> Population & Housing (4.18)
<input type="checkbox"/> Biological Resources (4.8)	<input type="checkbox"/> Public Services (4.19)
<input type="checkbox"/> Cultural Resources (4.9)	<input type="checkbox"/> Recreation (4.20)
<input type="checkbox"/> Energy (4.10)	<input type="checkbox"/> Transportation (4.21)
<input type="checkbox"/> Geology and Soils (4.11)	<input type="checkbox"/> Tribal Cultural Resources (4.22)
<input type="checkbox"/> Greenhouse Gas Emissions (4.12)	<input type="checkbox"/> Utilities & Service Systems (4.23)
<input type="checkbox"/> Hazards & Hazardous Materials (4.13)	<input type="checkbox"/> Wildfire (4.24)
<input type="checkbox"/> Hydrology & Water Quality (4.14)	<input type="checkbox"/> Mandatory Findings of Significance (4.25)

<input type="checkbox"/> Land Use & Planning (4.15)	
---	--

4.3 Thresholds of Significance

Thresholds of significance are identifiable quantitative, qualitative or performance level standards of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by a Lead Agency and compliance with which means the effect will normally be determined to be less than significant (Guidelines §15064.7(a)).

With the exception of Transportation Vehicle Miles Travelled (VMT), the County has not adopted specific thresholds of significance and rather relies upon the specific questions relating to the topical environmental factors listed in Appendix G of the State CEQA Guidelines to assist in the determination of a potentially significant impact. The Orange County Board of Supervisors adopted County VMT guidelines at its November 17, 2020 meeting pursuant to SB743 to include VMT analysis methodology and thresholds. The implementation of SB743 requires CEQA documents to include VMT analysis methodology and thresholds for land use projects. For transportation projects, because they are not “land use projects,” the lead agency has discretion to select the methodology used to evaluate VMT impacts.

4.4 Environmental Baseline

To adequately determine the significance of a potential environmental impact, the environmental baseline must be established. Guidelines Section 15125(a) states in pertinent part that the existing environmental setting will normally constitute the baseline physical conditions that will assist the County in a determining if an impact is significant.

Therefore, the environmental baseline for this Project constitutes the existing physical conditions as they exist at the time that the environmental process commenced.

4.5 Aesthetics <i>Except as provided in Public Resources Code Section 21099, would the Project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the Project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Response to Question a): No Impact. The Project area is in the community of Modjeska, Orange County, California in unincorporated Orange County. Modjeska is primarily a residential use community. The Silverado-Modjeska Specific Plan was created with the purpose of promoting planned development that least disturbs natural contours and vegetation and preserves areas of scenic beauty (County of Orange 1977). The Resources Element in the County of Orange General Plan and the Silverado-Modjeska Specific Plan do not specifically identify Modjeska Canyon as a scenic vista.

The scenic vistas surrounding the Project area include mountains, creeks, trees, and ridges. The new Modjeska Canyon Bridge would not affect a scenic vista within the canyon due to the limited exposure and narrow views from within the canyon and the Project area. Additionally, the narrow road and limited right of way requires the replacement structure be placed in the same location as the existing structure. No impacts are anticipated.

Response to Question b): No Impact. The Project would not damage scenic resources within a state scenic highway since the existing bridge is not a scenic resource and the surrounding landscape will not be permanently altered. The replacement structure will also be placed in the same location as the existing structure. Additionally, the Modjeska Canyon Bridge is not designated as a State Scenic Highway. No impacts are anticipated.

Response to Question c): Less than Significant Impact. The Project site is within Modjeska Canyon with a hillside just north of the bridge and contiguous vegetation surrounding the bridge and within the riparian habitat along Santiago creek that flows under. Due to the curve of the roads from the north and south approach, the bridge is not visible until one is upon it. From the bridge itself, a brief glimpse of the creek can be seen as it travels to the west. The Project is not anticipated to degrade the existing visual character or quality of public views of the site and surroundings. Approximately 16 trees (see Table 11. Anticipated Tree Removal), within the riparian woodland are anticipated to be removed to allow for construction access and constructability of the Project. However, all tree resources will be evaluated to determine where trees may remain protected in place without damaging essential root systems within the tree drip lines. Additionally, with compensatory measure **BIO-9**, any temporary and permanent effects from tree removal would be compensated. Ultimately, the Project would not have any long-term impacts to the visual character of the area. Less than Significant Impacts are anticipated.

Response to Question d): Less than Significant Impact. For the rural setting, no bridge light or landscaping is anticipated. No new light sources would occur as a result of the new bridge. The contractor will not be permitted to work during the night and no construction lighting will be allowed. Therefore, the Project would result in no impact to light and glare.

<p>4.6 Agriculture and Forestry Resources</p>	<p>Potentially Significant Impact</p>	<p>Less than Significant With Mitigation Incorporated</p>	<p>Less than Significant Impact</p>	<p>No Impact</p>
<p><i>In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the Project:</i></p>				
<p>a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?</p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input checked="" type="checkbox"/></p>
<p>b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?</p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input checked="" type="checkbox"/></p>

<p>c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code 12220 (g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51004(g))?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>d) Result in the loss of forest land or conversion of forest land to non-forest use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or forest land to non-forest use?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

The land use designation in the Project area is Suburban Residential with Rural Residential surrounding the immediate area. The Cleveland National Forest surrounds the residential use to the north, south, and east of the Project.

Response to Question a): No Impact. The California Department of Conservation’s California Important Farmland Finder identified the Project area as “Urban and Built-Up Land” and the surrounding area as “Other Land” (CDC 2016). Additionally, the proposed bridge replacement is not within or near Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. Therefore, no impacts are anticipated.

Response to Question b): No Impact. The proposed bridge replacement would not conflict with any agricultural zoning or a Williamson Act contract. The closest parcels identified under a Williamson Act are approximately 4 miles southeast of the Project area. The Project will not impact these parcels.

Response to Question c): No Impact. The Project area is at the boundary of the Cleveland National Forest; however, it is not located within the National Forest. The project area is not zoned as timberland, forest land, or for timberland production. The proposed bridge replacement would not conflict with existing zoning for, or cause zoning of, timberland or timberland zone Timberland Production.

Response to Question d): No Impact. As previously addressed, the proposed bridge would replace an existing bridge, and while the proposed bridge would be wider than the existing bridge, it would not significantly alter the existing land use. The project area is not zoned for, nor does it include forest land. Specifically, the Project does not involve forest land and would replace an existing bridge. The Cleveland National Forest is not in the immediate vicinity of the Project. Therefore, the Project would not result in the loss of forest land or convert forest land to non-forest use.

Response to Question e): No Impact. The Project area is not located on or adjacent to any lands identified as Important Farmland. The site is near the Cleveland National Forest, but not in the immediate vicinity. The proposed bridge replacement would result in neither a significant alteration of current use nor conversion of existing or adjacent Important Farmland and forest land. Therefore, no conversion of Important Farmland or forest land uses would occur.

4.7 Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors affecting a substantial number of people?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Affected Environment

The Project is located within Orange County, an area within the South Coast Air Basin (SCAB). Air regulation in the SCAB is administered by the South Coast Air Quality Management District (SCAQMD). The SCAQMD is the agency responsible for monitoring and regulating air pollutant emissions from stationary, area, and indirect sources within the SCAB. The SCAQMD also has responsibility for monitoring air quality and setting and enforcing limits for source emissions. California Air Resources Board (CARB) is the agency with the legal responsibility for regulating mobile source emissions. The SCAQMD is precluded from such activities under State law. The SCAQMD is the agency responsible for preparing regional air quality plans under the state and federal Clean Air Act.

Existing air quality conditions in the Project area can be characterized in terms of the ambient air quality standards that the state of California (California Ambient Air Quality Standards [CAAQS]) and the federal government NAAQS have established for several different pollutants. For some pollutants, separate standards have been set for different measurement periods. Most standards have been set to protect public health. For some pollutants, standards have been based on other values (such as protection of crops, protection of materials, or avoidance of nuisance conditions). Table 7 shows the state and federal standards for a variety of pollutants. Ambient air pollutant concentrations are measured at 39 permanent monitoring stations throughout the Basin. The federal and state governments have established ambient air quality standards for six criteria pollutants: ozone, CO, NO₂, SO₂, particulate matter (PM_{2.5} and PM₁₀), and lead. Within the SCAQMD, ozone and PM_{2.5} and PM₁₀ are considered pollutants of concern.

SCAQMD prepares an Air Quality Management Plan (AQMP) to describe air pollution control strategies to be implemented by counties or regions classified as nonattainment areas in order to bring the area into compliance with the requirements of federal and State air quality standards. The AQMP utilizes local planning agencies future Projections identified in their General Plans to determine control strategies for regional compliance status, and identifies Projects potentially causing a significant impact on air quality which would impede fulfilling compliance of the federal and State air quality standards. Projects consistent with the local General Plan are generally considered consistent with the AQMP, as the AQMP is based on Projections from local General Plans. Additionally, the estimated pollutants emitted from any Project must not exceed any significance threshold set by the SCAQMD or cause a significant impact on air quality for any individual Project to be determined consistent with the AQMP. If significance thresholds are exceeded, the Project can be considered consistent with the AQMP by implementing feasible mitigation measures to reduce a Project's impact level from significant to less than significant under CEQA.

Under NAAQS, the Project is located in an area that is in non-attainment for 8-hour ozone, 1-hour ozone, PM_{2.5}, and partial non-attainment for lead. It is in attainment or unclassified for other Federal criteria pollutants. Under CAAQS, the Project is located in an area that is in non-attainment for 8-hour ozone, 1-hour ozone, PM₁₀, and PM_{2.5}. It is in attainment or unclassified for other State criteria pollutants. Table 7 shows Ambient Air Quality Standards. Table 8 summarizes the ambient air quality classifications for the Project location.

The SCAB has a hot, dry, desert climate. Precipitation is approximately 14 inches annually and occurs mostly in the winter months from active frontal systems and occasionally in summer months from thunderstorms. The Project site is at an elevation of approximately 1,275 feet above sea level. The average maximum temperature annually is 83 degrees Fahrenheit and the average minimum temperature annually is 47 degrees Fahrenheit (U.S. Climate Data, 2021). The average temperature overall is 63.5 degrees Fahrenheit.

Table 7: Ambient Air Quality Standards

Ambient Air Quality Standards							
Pollutant	Averaging Time	California Standards ¹		National Standards ²			
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷	
Ozone (O ₃) ⁸	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry	
	8 Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)			
Respirable Particulate Matter (PM ₁₀) ⁹	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis	
	Annual Arithmetic Mean	20 µg/m ³		—			
Fine Particulate Matter (PM _{2.5}) ⁹	24 Hour	—	—	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis	
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ³			15 µg/m ³
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ³)	—	Non-Dispersive Infrared Photometry (NDIR)	
	8 Hour	9.0 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)			
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		—			
Nitrogen Dioxide (NO ₂) ¹⁰	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m ³)	—	Gas Phase Chemiluminescence	
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)		0.053 ppm (100 µg/m ³)			Same as Primary Standard
Sulfur Dioxide (SO ₂) ¹¹	1 Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	—	Ultraviolet Fluorescence; Spectrophotometry (Parosalaniline Method)	
	3 Hour	—		—			0.5 ppm (1300 µg/m ³)
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas) ¹¹			—
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) ¹¹			—
Lead ^{12,13}	30 Day Average	1.5 µg/m ³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption	
	Calendar Quarter	—		1.5 µg/m ³ (for certain areas) ¹²			Same as Primary Standard
	Rolling 3-Month Average	—		0.15 µg/m ³			
Visibility Reducing Particles ¹⁴	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards			
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography				
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence				
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography				

See footnotes on next page ...

For more information please call ARB-PIO at (916) 322-2990

California Air Resources Board (5/4/16)

(Table 7 continued)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above $150 \mu\text{g}/\text{m}^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from $15 \mu\text{g}/\text{m}^3$ to $12.0 \mu\text{g}/\text{m}^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at $35 \mu\text{g}/\text{m}^3$, as was the annual secondary standard of $15 \mu\text{g}/\text{m}^3$. The existing 24-hour PM10 standards (primary and secondary) of $150 \mu\text{g}/\text{m}^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard ($1.5 \mu\text{g}/\text{m}^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

For more information please call ARB-PIO at (916) 322-2990

California Air Resources Board (5/4/16)

Table 8: Attainment for the South Coast Air Basin

Pollutant	Attainment Status	
	Federal	State
O ₃ –8-hour	Nonattainment (Extreme)	Nonattainment
O ₃ –1-hour	Nonattainment (Extreme)	Nonattainment
PM ₁₀	Attainment (Maintenance)	Nonattainment
PM _{2.5}	Nonattainment (Serious)	Nonattainment
CO	Attainment (Maintenance)	Attainment
NO ₂	Attainment (Maintenance)	Attainment
SO ₂	Unclassifiable/Attainment	Not Available
Sulfates	No Federal Standard	Attainment
Lead	Nonattainment (Partial)	Not Available
Hydrogen Sulfide	No Federal Standard	Attainment

Sources: National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality, SCAQMD February 2016, <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf?sfvrsn=14>

Standards (CAAQS) Attainment Status for South Coast Air Basin

The State CEQA Guidelines further state that the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make the determinations above. The SCAQMD has specified significance thresholds (SCAQMD 2016) to determine whether mitigation is needed for Project-related air quality impacts. The SCAQMD's thresholds of significance for construction- and operation-related emissions are presented in Table 9.

Table 9: South Coast Air Quality Management District Thresholds of Significance

Pollutant	Thresholds of Significance	
	Construction (pounds per day)	Operation (pounds per day)
NO _x	100 lbs/day	55 lbs/day (0.0275 tons/day)
VOC	75 lbs/day	55 lbs/day (0.0275 tons/day)
PM ₁₀	150 lbs/day	150 lbs/day (0.075 tons/day)
PM _{2.5}	55 lbs/day	55 lbs/day (0.0275 tons/day)
SO _x	150 lbs/day	150 lbs/day (0.075 tons/day)
CO	550 lbs/day	550 lbs/day (0.275 tons/day)
Lead	3 lbs/day	3 lbs/day (0.001 tons/day)

Source: SCAQMD 2019, <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2>

Asbestos

Exposure and disturbance of rock and soil that contains asbestos can result in the release of fibers to the air and consequent exposure to the public. Asbestos most commonly occurs in ultramafic rock that has undergone partial or complete alteration to serpentine rock (proper rock name serpentinite) and often contains chrysotile asbestos. In addition, another form of asbestos, tremolite, can be found associated with ultramafic rock, particularly near faults. Sources of asbestos emissions include: unpaved roads or driveways surfaced with ultramafic rock, construction activities in ultramafic rock deposits, or rock quarrying activities where ultramafic rock is present. Based on the map of naturally-occurring asbestos

locations contained in *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos* (California Department of Conservation, Division of Mines and Geology 2000), major ultramafic rock formations are not found within proximity to the proposed Project site.

Response to Question a): Less than Significant Impact.

The SCAQMD is required to produce air quality management plans directing how the SCAB's air quality will be brought into attainment with the national and state ambient air quality standards. The most recent air quality management plan is *2016 Air Quality Management Plan* and it is applicable to Orange County. The purpose of the *2016 Air Quality Management Plan* is to achieve and maintain both the national and state ambient air quality standards described above.

In order to determine if a Project is consistent with the *2016 Air Quality Management Plan*, the SCAQMD has established consistency criterion which are defined in Chapter 12, Sections 12.2 and 12.3 of the SCAQMD's *CEQA Air Quality Handbook* and are discussed below.

Consistency Criterion No. 1: *The proposed Project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the 2016 Air Quality Management Plan.*

Consistency Criterion No. 1 refers to violations of the CAAQS and NAAQS. As evaluated under Issue (b) below, the Project would not exceed regional or localized significance thresholds for any criteria pollutant during construction or during long-term operation. Accordingly, the Project's regional and localized emissions would not contribute substantially to an existing or potential future air quality violation or delay the attainment of air quality standards.

Consistency Criterion No. 2: *The proposed Project will not exceed the assumptions in the 2016 Air Quality Management Plan.*

The *2016 Air Quality Management Plan* demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth Projections from local general plans adopted by cities in the district are provided to the Southern California Association of Governments (SCAG), which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP.

The bridge would serve the same average daily traffic with or without the bridge widening; therefore, the proposed Project would not change the number of vehicle trips or their operational characteristics, no change in the volume of vehicular emissions would occur; therefore, the Project would not substantially contribute to or cause deterioration of existing air quality. Further, the proposed Project would not increase emissions nor would the proposed Project prevent the goals outlined in Orange County's General Plan from being reached. It is determined that the Project is consistent with the AQMP; therefore, the Project would not conflict with or obstruct implementation of the AQMP.

Response to Question b): Less than Significant Impact. Construction of the Project would result in short-term and intermittent increases in criteria pollutants; however, no long-term operational impacts to net

increases of criteria pollutants would occur. According to results of the Project's Roadway Construction Emission Model (RCEM), construction effects would not result in an exceedance of the SCAQMD construction emission thresholds. Specifically, the RCEM determined that short-term local nuisance of increased criteria pollutants would be under the daily maximum pounds (lbs) per day SCAQMD thresholds (see Table 10). Therefore, the Project's effects to air quality would be considered less than significant with Best Management Practices. Discussion of the short-term construction and operational significance thresholds, as applicable to the proposed Project, are discussed below.

Construction Emissions

Temporary construction activities would include site preparation and bridge construction that will involve excavation, grading, constructing new shoulders, and other construction activities. During construction, short-term air quality effects are expected from the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. However, adherence to standard dust control and construction best management practices (BMPs) would be required as part of the Project's Construction Management Plan.

Emission from construction equipment powered by gasoline and diesel engines are also anticipated. The RCEM model (Appendix A) estimates construction equipment effects of criteria pollutants including CO, NOX, VOCs, directly emitted PM10 and PM2.5, and toxic air contaminants (TACs) such as diesel exhaust particulate matter. These emissions would be temporary and limited to the immediate area surrounding the construction site. The RCEM Version 9.0.0 model was calculated with the Project's construction anticipated to take approximately 8 months. The Project's construction emissions were modeled using the RCEM developed by Sacramento Metropolitan Air Quality Management District (SMAQMD 2020), which is the accepted model for all CEQA roadway Projects throughout California. According to SCAQMD air quality modeling guidance, the RCEM can be used to assist roadway project proponents with determining the emissions impacts of their projects (SCAQMD 2021). The RCEM results were then compared with the SCAQMD Air Quality Significance Thresholds to determine if the Project would exceed any regional thresholds of significance. As summarized in Table 10 below, due to the limited scale/intensity of the Project's construction activities, construction related emissions will not exceed SCAQMD threshold criteria for significant air quality impacts. Therefore, the Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment, and the Project's air quality effects would be considered less than significant.

Table 10: RCEM Emissions Estimates

Pollutant	Maximum Daily Construction Emissions Model Result (lbs/day)	SCAQMD Emissions Threshold (lbs/day)	
	Construction Only	Construction	Operation
Respirable Particulate Matter (PM10)	0.05	150	150
Fine Particulate Matter (PM2.5)	0.03	55	55
Oxides of Nitrogen (NOX)	1.20	100	55
Oxides of Sulfur (SOX)	0.01	150	150
Carbon Monoxide (CO)	0.59	550	550
Volatile Organic Compounds (VOC)	0.08	75	55

Source: SCAQMD 2019, <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2>

Operational Emissions

The proposed Project would replace the existing two-lane bridge, and there would be no additional travel lanes constructed. Currently, the average daily traffic for the existing bridge is 696, according to the County's most recent traffic count, which was conducted in March 2021. Since there will be no additional travel lanes added on the proposed bridge, there is no significant increase in vehicles anticipated. As a result, the Project is not anticipated to result in an increase of operational emissions.

Response to Question c): Less than Significant with Mitigation Incorporated. The Project would have less than significant impact on exposing sensitive receptors to substantial pollutant concentrations. Although the closest sensitive receptors are residences located approximately 160 feet southwest and approximately 90 feet southeast of the bridge, construction would be temporary. In addition, with the incorporation of Caltrans' Construction Site Best Management Practices, these impacts are not considered to be significant.

Response to Question d): Less than Significant with Mitigation Incorporated. The Project would have less than significant impact on creating objectionable odors. Some phases of construction, particularly asphalt paving, would result in short-term odors in the immediate area of each paving site(s). Such odors would be quickly dispersed below detectable thresholds as distance from the site(s) increases. Although the closest sensitive receptors are residences located approximately 90 feet of the bridge, construction would be temporary in nature and with the inclusion of Caltrans' Construction Site Best Management Practices, these impacts are not considered to be significant.

Avoidance, Minimization, and /or Mitigation Measures

All of the construction impacts to air quality are short-term in duration and, therefore, will not result in adverse or long-term impacts. In addition, implementation of Caltrans' Construction Site Best Management Practices will reduce any air quality impacts resulting from construction activities.

4.8 Biological Resources

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

f) Conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Regulatory Setting

“Special status species” include any species that has been afforded special recognition by federal, state or local resources agencies (e.g., U.S. Fish and Wildlife Service [USFWS], California Department of Fish and Wildlife [CDFW], etc.), and/or resource conservation organizations (e.g., California Native Plant Society [CNPS]). The term “special-status species” excludes those avian species solely identified under Section 10 of the Migratory Bird Treaty Act (MBTA) for federal protection. MBTA Section 10 protected species are afforded avoidance and minimization measures per state and federal requirements.

Affected Environment

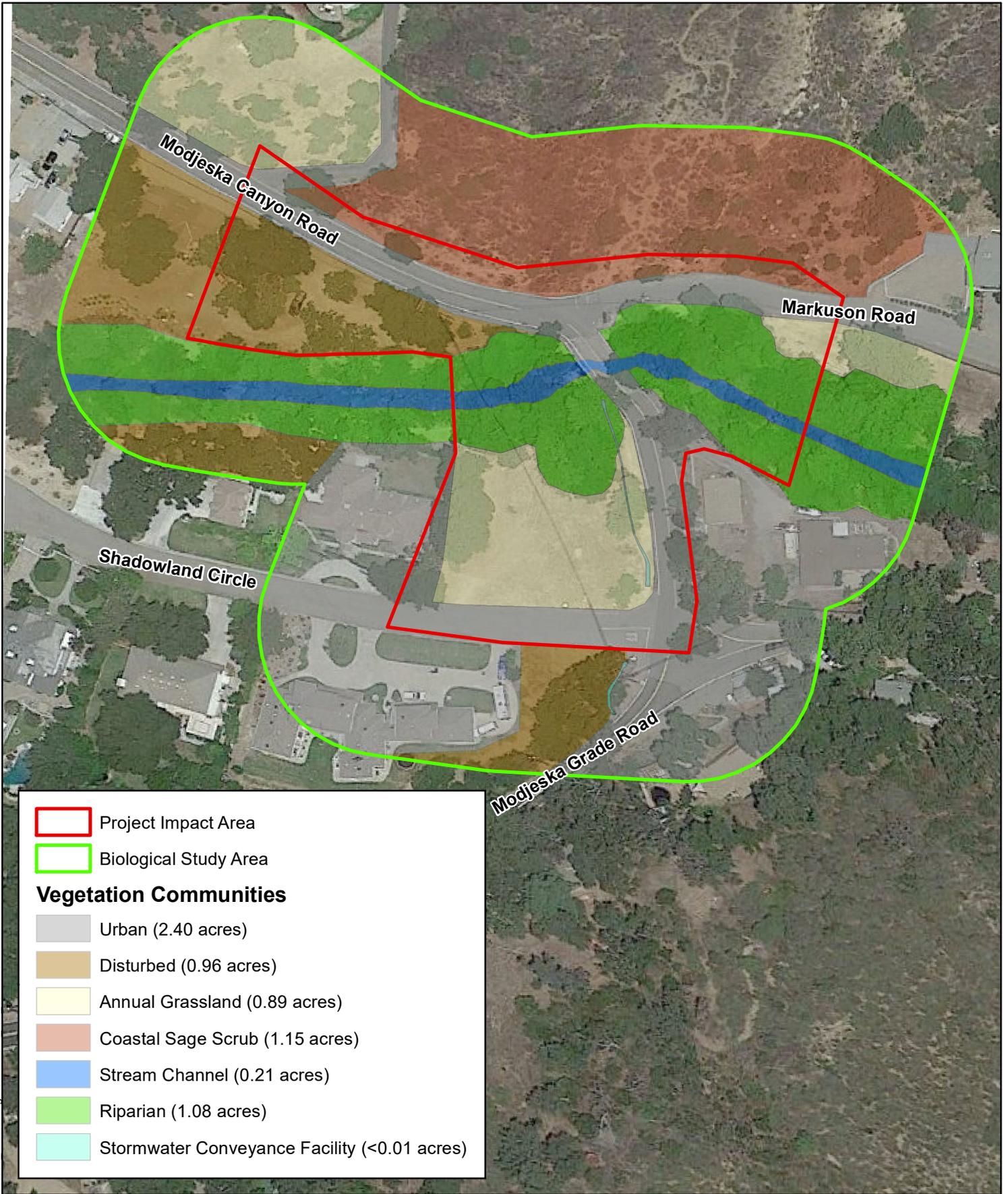
Physical Conditions

The Biological Study Area (BSA) is defined as the proposed Project Impact Area (PIA), plus a 100-foot buffer including potential staging areas and access routes. The BSA is approximately 6.70 acres. The elevation within the BSA is approximately 1,275 feet above mean sea level. In the vicinity of the BSA, annual temperatures range from a high of 76 degrees Fahrenheit to a low of 50 degrees Fahrenheit, and the average annual rainfall is 13 inches (U.S. Climate Data 2020). The topography within the BSA is generally flat. Soil within the BSA consists of Riverwash (63.7% of the BSA) and Sorrento loam, 2 to 9 percent slopes, warm MAAT, MLRA 19 (36.3% of the BSA) (NRCS 2020).

Biological Conditions

Field surveys were conducted on September 27, 2019 and included walking meandering transects through the entire BSA, observing vegetation communities, compiling notes on observed flora and fauna, and assessing the potential for existing habitat to support sensitive plants and wildlife. Based on field survey results, United States Geological Survey (USGS) Redding 7½ minute quadrangle topographic map, the USFWS National Wetland Inventory, and the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) (Appendix F), the only water feature within the BSA is Santiago Creek. Santiago Creek is an intermittent creek that drains most of the northern Santa Ana Mountains and is a tributary to the Santa Ana River. Within the BSA, Santiago Creek maintains flows during rain events throughout the fall, winter and spring, with complete drying in late spring through early fall. The creek bed has gravelly sand alluvium substrate from 0 to 6 inches and stratified gravelly coarse sand to sandy loam from 6 to 60 inches (NRCS 2020). Within the BSA, a stormwater conveyance facility begins along Modjeska Grade Road, continues through the BSA, and ends as a discharge point above the ordinary high water mark (OHWM) of Santiago Creek.

Dominant vegetation communities within the BSA include urban, disturbed, annual grassland, stream channel, stormwater conveyance facility, coastal sage scrub, and riparian woodland (Figure 7. Vegetation Communities within the Biological Study Area).



\\1836-11\fs1\Bridges\Cultural\F2_Loc_10-12-10.mxd

Source: ESRI World Street Maps Online; Dokken Engineering 4/28/2021; Created By: adellas



1 inch = 100 feet



FIGURE 7
Vegetation Communities within the BSA
 BRLO-5955(094)
 Modjeska Canyon Road Bridge Replacement Project
 Modjeska Canyon, Orange County, California

Urban

Urban habitat is man-made infrastructures, defined by the absence of any vegetation, and is constructed with gravel, compacted soil, and/or asphalt. Urban areas within the BSA are categorized as roadway (Modjeska Canyon Road) and associated pullouts and driveways along the road. No residences are within the BSA but are adjacent to the BSA within approximately 20 feet of proposed Project activities.

This habitat type is categorized as highly disturbed. Within the BSA, approximately 2.40 acres is classified as urban.

Disturbed

Disturbed habitat occurs as unpaved landscaped areas. Disturbed habitat within the BSA consists of a graveled driveway parking area west of the bridge. Vegetation consists of sparse forbs and grasses, ornamental plantings, and coast live oak (*Quercus agrifolia*). Approximately 0.96 acres of the BSA is classified as disturbed.

Annual Grassland

Annual grassland habitat within the BSA exhibits a composition of non-native grasses including, smilo grass (*Stipa miliacea*), wild oat (*Avena fatua*), red brome (*Bromus madritensis ssp. rubens*), and non-native forbs including, black mustard (*Brassica nigra*), prostrate sandmat (*Euphorbia prostrata*), sow-thistle (*Sonchus oleraceus*), and white sweet clover (*Melilotus albus*). Approximately 0.89 acres of the BSA is classified as annual grassland.

Coastal Sage Scrub

Coastal sage scrub (CSS) habitats are typified by low to moderate-sized shrubs with mesophytic leaves, flexible branches, semi-woody stems growing from a woody base, and a shallow root system. Coastal scrub within the BSA is generally composed of California sagebrush (*Artemisia californica*) and California buckwheat (*Eriogonum fasciculatum*). Within the BSA, approximately 1.15 acres is classified as CSS habitat.

Stream Channel – Santiago Creek

Within the BSA, the Santiago Creek stream channel was delineated using primary indicators of OHWM as described in the USACE OHWM delineation manual. The stream channel is dominated by run and riffle areas with cobble, gravel, and sand substrates. Within the stream channel habitat, a composition of vegetation accustomed to wet conditions exists including, watercress (*Nasturtium officinale*), field horsetail (*Equisetum arvense*), California mugwort (*Artemisia douglasiana*), tall flatsedge (*Cyperus eragrostis*), and umbrella plant (*Cyperus involucratus*). Delineation results determined that approximately 0.21 acres of Santiago Creek are within the BSA.

Stormwater Conveyance Facility

Within the BSA, a stormwater conveyance facility begins along Modjeska Grade Road, continues through the BSA, and ends as a discharge point above the OHWM of Santiago Creek. The stormwater conveyance facility consists of asphalt paving and confluences with native soils at the western toe of slope for Modjeska Canyon Road. The system is considered a man-made roadside drainage feature designed to convey seasonal rainwater flows through the Project site. The stormwater conveyance facility ranges in width from approximately 1 ft. to 5 ft. Vegetation within the system was composed of ruderal and invasive species consistent with the annual grassland habitat type. Less than 0.01 acres of stormwater conveyance facility are within the BSA.

Riparian Woodland

Riparian Woodland is a tall deciduous streamside woodland that is dominated by western sycamore (*Platanus racemosa*) and occasional white alders (*Alnus rhombifolia*). These woodland stands seldom form closed canopies and may even appear as trees scattered in a shrubby thicket. The community is associated with rocky stream beds, such as Santiago Creek, that are subject to high intensity flooding. The intermittent nature of these drainages favors western sycamore as the dominant species, but white alder increases in abundance on more perennial streams. Within the BSA, the riparian woodland is dominated by western sycamore and white alder, with additional vegetation accustomed to generally wet conditions including Pacific willow (*Salix lasiandra*) and mule fat (*Baccharis salicifolia*). Approximately 1.08 acres of the BSA is classified as riparian woodland.

Wildlife

Minimal wildlife species were observed during the biological surveys. In conjunction with literature research and habitat assessments conducted during the biological surveys, wildlife anticipated to occur within the BSA is limited to common wildlife species typically found in the temperate climate of a southern California riverine and riparian ecosystem. Adjacent habitats within the BSA are highly disturbed through residential activity, and the mixed urban landscape.

Habitat Connectivity

Santiago Creek runs east to west through the BSA. The Santiago Creek corridor may supply habitat connectivity for terrestrial and aquatic species; however, Santiago Creek is not identified as an Essential Connectivity Area by CDFW. The Project area is listed as Rank 3 on the CDFW Terrestrial Connectivity Dataset, which is one of four key components of the overall CDFW Area of Conservation Emphasis suite for terrestrial conservation information along with Terrestrial Biodiversity, Significant Habitats, and Climate Resilience. Rank 3 identifies areas that have connectivity importance, but have not been identified as channelized areas, specific species corridors, or habitat linkages at this time (CDFW 2020).

Response to Question a): Less than Significant with Mitigation Incorporated. The Project would have a less than significant impact on special status species with mitigation incorporated. Based on the results of the September 27, 2019 biological surveys, 12 special status wildlife species were determined to have potential to occur within the BSA and are discussed in detail below. Arroyo Toad (ARTO) is presumed absent, however, is also discussed below (in addition to the other 12 species) due to their prevalence in the broader vicinity.

Special Status Amphibian Species

Arroyo Toad (ARTO)

According to the USFWS Critical Habitat Mapper (see Figure 9), the BSA falls within Unit 8 of ARTO critical habitat; however, in order to allow Orange County Public Works (OCPW) to conduct bridge replacement and future maintenance work in areas where ARTO may occur and/or where federally-designated critical habitat is present, the USFWS Carlsbad Fish and Wildlife Office (CFWO) requested that ARTO habitat suitability assessments and subsequent focused surveys be conducted in the vicinity of proposed and future work areas, including areas where ARTOs have previously been reported. The results of focused surveys would determine the need, if any, for future informal consultation with the CFWO when OCPW is proposing work in these areas. The approach established for the ARTO habitat suitability and subsequent protocol presence/absence survey was reviewed and agreed to by Jonathan Snyder, USFWS Division Chief, and OCPW according to personal communication with Giles Matthews with OCPW.

The initial ARTO suitability assessment was conducted in March and April 2019 in specific areas, as identified by OCPW (with concurrence with USFWS), within Modjeska, Santiago, Silverado, and Trabuco Canyons, as well as specific areas within general survey boundaries where ARTO have been previously recorded as provided by the CFWO. While not all reaches of these creeks were physically inspected, large representative reaches were assessed in order to confidently determine the habitat suitability for ARTO within the entire survey area. In June 2019, protocol ARTO presence/absence surveys were also conducted within specific reaches of these streams. The 2019 survey effort along portions of Silverado, Santiago, and Trabuco Creeks yielded no observations of ARTO. No ARTO egg strands, larvae, or juveniles were observed. No male ARTO calls were detected during any of the visits.

Despite exceptional survey conditions, no ARTO were detected within the identified portions of Silverado, Santiago, and Trabuco Creeks during ICF's 2019 focused survey effort. With no ARTO being found during this protocol survey effort, the results concluded that ARTO are currently absent from the survey area including the portion of Santiago Creek within the BSA. Combining these findings with the results of the ARTO habitat suitability assessment, and Forest Service findings that no suitable ARTO habitat is present within any of these creeks within the Cleveland National Forest, no suitable ARTO habitat would be considered present within the BSA or PIA.

Coast Range Newt

Coast Range Newt (*Taricha torosa*) is not listed under FESA or CESA as a threatened or endangered species. Also known as the California newt, the species occurs commonly in the Coast Ranges from central Mendocino County south to northern San Diego County. The species is considered a species of special concern (SSC) from Monterey County south, whereas the species has no protection status north of Monterey County. The species occurs primarily in valley-foothill hardwood, valley-foothill hardwood-conifer, coastal scrub and mixed chaparral, but is also known from annual grassland and mixed conifer types in elevation ranges from near sea level to about 6,000 ft. Breeding and egg-laying occur from fall through late spring in intermittent streams and rivers, permanent and semi-permanent ponds, lakes and reservoirs. In the spring, adults return to subterranean summer aestivating sites (CWHR 2018).

No coast range newts were identified during the September 27, 2019 biological survey. The BSA does contain hardwood sycamore/alder riparian woodland habitat and is adjacent to sloped chaparral habitat. Santiago Creek, which runs through the BSA, is an intermittent stream and could serve as breeding habitat for the species. The nearest historic (1999) CNDDDB occurrence of the species is within the general area of the USGS 7.5-minute quadrangle of Black Star Canyon, which is approximately 3 miles north of the Project area. Additionally, a recent (2018) iNaturalist research grade observation was documented within the BSA. Due to the presence of potentially suitable habitat and recent local occurrences, the species is considered to have a low to moderate potential to occur within the BSA.

Western Spadefoot

The western spadefoot (*Spea hammondi*) is not a state or federally listed species but is a CDFW SSC. In California, the species is distributed throughout the Central Valley; along the Coast Ranges in Monterey, San Luis Obispo, and Santa Barbara counties; and in Southern California south of the Transverse Mountains and west of the Peninsular Mountains. Western spadefoot inhabits woodlands and grasslands and is almost entirely terrestrial, only entering water to breed in vernal pools from January through May after which the female deposits eggs on emergent vegetation before returning to land. Their diet consists

of a variety of insects and earthworms. Western spadefoot estivates through the dry season underground and remain dormant until winter rains soften soils and refill vernal pools (CWHR 2000).

No western spadefoots were identified during the September 27, 2019 biological survey. The BSA does contain potentially suitable sandy or gravelly soils in mixed riparian woodland. There are 2 recent CNDDDB occurrences of the species within approximately 2.5 miles of the Project area to the north and south (2017 and 2003). Due to the presence of potentially suitable habitat and recent nearby occurrences, the species is considered to have a low to moderate potential to occur within the BSA.

Project Impacts

Construction activities within Santiago Creek would contribute to temporary impacts to the creek and temporary and permanent impacts to the adjacent riparian woodland habitat that may be utilized by coast range newt and western spadefoot. Temporary impacts to the creek channel would be limited to approximately 0.04 acres (120 linear feet) of temporary ground disturbance associated with construction activities. Additionally, the Project will have approximately 0.12 acres of temporary impacts and approximately 0.04 acres of permanent impacts to riparian woodland habitat.

Special Status Avian Species

Coastal California Gnatcatcher

Coastal California gnatcatcher (CAGN) (*Polioptila californica californica*) is a federal listed threatened species under the FESA and listed as a CDFW SSC. This species is a small, non-migratory songbird that occurs along the Pacific coastal regions of southern California and northern Baja California, Mexico (Zink, 2000). The range and distribution of the gnatcatcher is closely aligned with coastal scrub vegetation, but the species is known to use adjacent habitats for foraging and dispersal. The breeding season of the coastal California gnatcatcher extends from about February 1 through September 1, with the peak of nesting activity occurring from mid-March through mid-May. Among the threats contributing to the coastal California gnatcatcher's decline are habitat destruction due to housing development, shopping malls, and farmlands. In addition, nesting attempts often fail, partly because of brown-headed cowbird (*Molothrus ater*) parasitism, wildfire, and grazing.

No coastal California gnatcatcher were visually or audibly identified during the September 27, 2019 biological survey. A small portion of the BSA contains CSS communities; however, this habitat type is outside of the PIA and no effects to CSS habitat would occur. The BSA does contain potentially suitable riparian woodland adjacent to sloped chaparral habitat. Furthermore, the nearest CNDDDB occurrence of the species is approximately 4 miles northwest of the Project area (2002). Due to the presence of marginally suitable habitat and nearby occurrences, the species is considered to have a low to moderate potential to occur within the BSA.

Least Bell's Vireo

The least Bell's Vireo (LBVI) (*Vireo bellii pusillus*) is a federal and state listed endangered species under the FESA and CESA. The species is one of four subspecies of Bell's Vireo recognized by the American Ornithologist's Union (AOU 1957). They are only 11.5-12.5 centimeters long (about 4.5 to 5.0 inches). It is the western-most subspecies, breeding entirely within California and northern Baja California (Kus, 2008). By the time the species was listed by the USFWS in 1986, it had been extirpated from most of its historic

range and numbered just 300 pairs statewide. In 1998, the population size was estimated at 2,000 pairs. Among the threats contributing to the Least Bell's vireo's decline are habitat destruction due to urban development, golf courses, agriculture conversion, and livestock grazing. In addition, traffic noise, feral pets, and recreational use of habitat contribute to disturbances.

The County has coordinated with the appropriate Caltrans and USFWS liaison for discussions regarding the LBVI and CAGN effect determination. On April 13, 2020 Charles Baker (Caltrans District 12, Environmental Branch Chief) informed Jonathan Snyder (Carlsbad USFWS Assistant Field Supervisor) of the proposed Project and requested guidance on the Project's assumed presence of LBVI and CAGN with proposed avoidance and minimization measures, due to the lack of suitable habitat within the BSA. On April 13, 2020, Mr. Snyder responded and stated that with appropriate conservation measures, a "not likely to adversely affect" determination would be appropriate for the Project's effects to LBVI and CAGN. Additionally, Mr. Snyder confirmed that the NES document would be suitable to present potential effects and conservation measures for LBVI and CAGN, rather than a separate document (i.e. Biological Assessment).

No least Bell's vireo were visually or audibly identified during the September 27, 2019 biological surveys. The BSA does contain potentially suitable riparian woodland in the vicinity of water and dry river bottoms such as the intermittent Santiago Creek within the BSA. The nearest presumed extant CNDDDB occurrence of the species is approximately 3 miles south of the Project area (2017). Due to the presence of marginally suitable habitat and nearby occurrences, the species is considered to have a low to moderate to occur within the BSA.

Project Impacts

No direct impacts to special status nesting birds are anticipated. Furthermore, no CSS habitat would be impacted by the proposed Project. However, the proposed Project does anticipate temporary and permanent impacts to riparian woodland habitat, which may serve as potentially suitable foraging and dispersal habitat. The Project will have approximately 0.12 acres of temporary impacts and approximately 0.04 acres of permanent impacts to riparian woodland habitat, including the anticipated removal of approximately 16 large diameter trees (see Table 11 below). Species specific avoidance, minimization and mitigation measures **BIO-15** and **BIO-17** have been incorporated into the Project design to avoid impacts to special status avian species and protected migratory birds to the greatest extent practicable. These measures will ensure no special status avian species or protected migratory birds are nesting within or directly adjacent to the Project vicinity during vegetation removal and will mitigate for impacts to suitable habitats. Furthermore, due to a lack of suitable habitat in conjunction with the proposed Project design, these avian species have been determined to have a very low potential to occur within the BSA. Therefore, with the Project's proposed avoidance and minimization measures, USFWS has concurred that a "may affect, but not likely to adversely affect" determination for least Bell's vireo and coastal California gnatcatcher would be appropriate.

With the implementation of avoidance and minimization measures **BIO-1** through **BIO-7** impacts to potentially suitable habitat for special status avian species would be reduced to the greatest extent practicable. Additionally, with compensatory mitigation measures **BIO-8** and **BIO-9** any temporary and permanent effects to potentially suitable habitat would be compensated. Furthermore, with implementation of the species-specific avoidance and minimization measures **BIO-14** through **BIO-16**, direct impacts to California coastal gnatcatcher and least Bell's vireo are not anticipated and additional compensatory mitigation specific to these species is not proposed at this time.

Orange County has coordinated with the appropriate Caltrans and USFWS liaison for discussions regarding the LBVI and CAGN effect determination. On April 13, 2020 Charles Baker (Caltrans District 12, Environmental Branch Chief) informed Jonathan Snyder (Carlsbad USFWS Assistant Field Supervisor) of the proposed Project and requested guidance on the Project's assumed presence of LBVI and CAGN with proposed avoidance and minimization measures, due to the lack of suitable habitat within the PIA. On April 13, 2020, Mr. Snyder responded and stated that with appropriate conservation measures, a "not likely to adversely affect" determination would be appropriate for the Project's effects to LBVI and CAGN. Additionally, Mr. Snyder confirmed that the NES document would be suitable to present potential effects and conservation measures for LBVI and CAGN, rather than a separate document, i.e. Biological Assessment.

Special Status Reptile Species

Coast Horned Lizard

The coast horned lizard (*Phrynosoma coronatum*) is not a State or Federally listed species but is a CDFW SSC. It inhabits valley-foothill hardwood, conifer forest, and riparian woodland habitats, as well as pine-cypress, juniper woodland, and annual grasslands with sandy areas, washes or flood plains. The species occurs in the Sierra Nevada foothills from Butte County to Kern County and throughout the central and southern California coast. Frequently found near ant hills. Egg laying occurs from May to June, and some females may lay two clutches per year. The species elevation range is sea level to 8,000 ft. but are found chiefly below 900 meters (3,000 ft. in southern California (CWHR 2000).

No coast horned lizard was observed during the September 27, 2019 biological survey. The BSA does contain potentially suitable riparian woodland habitat and sandy soils. Additionally, the nearest CNDDDB occurrence of the species is approximately 1 mile south of the Project area (2017). Due to the presence of suitable habitat and recent, nearby occurrences, the species is considered to have a high potential to occur within the BSA.

Coast Patch-Nosed Snake

The coast patch-nosed snake (*Salvadora hexalepis virgulata*) is not a State or Federally listed species but is a CDFW SSC. It is widely distributed throughout southern California from the coast to the eastern border, and as far north as Owens Valley in desert habitats. The species is most commonly found in coastal chaparral, desert scrub, washes, sandy flats, and rocky areas. The species is an active diurnal forager and is susceptible to high levels of vehicle mortality and requires small mammal burrows for refuge and overwintering sites. Mating generally takes place between April and June with egg laying occurring between May and August. The species occurs from below sea level to approximately 7,000 ft. (CWHR 2008).

No coast patch-nosed snake was observed during the September 27, 2019 biological survey. The BSA does not contain brush or shrubby chaparral, rock hillslopes or plains suitable for the species. However, the species may use the Santiago creek habitat as a wildlife corridor. One historic (1999) presumed extant CNDDDB occurrence of the species is approximately 3.7 miles northwest of the BSA (1999). Additionally, a recent (2019) iNaturalist research grade observation was documented less than 0.5 mile east of the BSA. Due to the potential for the species to use the BSA as a wildlife corridor and the recent local occurrence, the species is considered to have a low to moderate potential to occur within the BSA.

Coastal Whiptail

The coastal whiptail (*Aspidoscelis tigris stejnegeri*) is not a State or Federally listed species but is a CDFW SSC. The species is widely distributed but uncommon over much of its range in California, except in desert regions where it is abundant in suitable habitats. The species is found throughout the state except in the humid northwest, along the humid outer Coast Ranges, or mountainous regions. The species is primarily diurnal and can be found in a variety of habitats including valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, mixed conifer, pine-juniper, chamise-redshank chaparral, mixed chaparral, desert scrub, desert wash, alkali scrub, and annual grassland. Reproductive season for the species varies geographically and from year to year depending on local conditions. The species occurs from below sea level to approximately 7,500 ft. (Zeiner et al. 1988-1990).

No coastal whiptail was observed during the September 27, 2019 biological survey. The BSA contains riparian woodland habitat suitable for the species. The nearest recent (2008) presumed extant CNDDDB occurrence of the species is approximately 4.5 miles southwest of the BSA. Additionally, a recent (2019) iNaturalist research grade observation was documented approximately 1 mile east of the BSA. Due to the presence of potentially suitable habitat, and local recent occurrences, the species has a low to moderate potential to occur.

Orange-Throated Whiptail

The orange-throated whiptail (*Aspidoscelis hyperythra*) is not a State or Federally listed species but is a CDFW SSC. It is uncommon to fairly common over much of its range in Orange, Riverside, and San Diego counties west of the crest of the Peninsular Ranges. The species prefers washes and other sandy areas with patches of brush and rocks (Stebbins 1972). The species is active diurnal from early spring to mid- or late summer. The species has an extensive home range and is likely not territorial. Breeding activities begin in April and egg laying continues to mid-July. In California the species elevation range extends from near sea level to approximately 3,410 ft. (Zeiner et al. 1988-1990).

No orange-throated whiptail was observed during the September 27, 2019 biological survey. The Project does contain potentially suitable hardwood riparian woodland habitat. In addition, the nearest CNDDDB occurrence of the species is approximately 1 mile south of the Project area (2016). Due to the presence of suitable habitat adjacent to the Project area and nearby, recent occurrences, the species has a low to moderate potential to occur.

Red-Diamondback Rattlesnake

The red-diamondback rattlesnake (*Crotalus ruber*) is not a State or Federally listed species but is a CDFW SSC. It is distributed along coastal San Diego County to the eastern slope of the mountains and north through western Riverside County into southernmost San Bernardino County. The species prefers chaparral, woodland, and arid desert habitats in rocky areas and dense vegetation. The species is active from spring to fall, but the period of greatest activity is from March to June. Young are live born from mid-August to October, and thus require a diet and safe place for birth, likely in burrows or under substantial cover objects such as dense vegetation or large rocks. The species elevation range occurs from sea level to approximately 3,000 ft. (Zeiner et al. 1988-1990).

No red-diamondback rattlesnake was observed during the September 27, 2019 biological survey. The Project area does contain potentially suitable rocky areas through the Santiago Creek corridor. The

nearest recent CNDDDB occurrence of the species is approximately 4 miles southeast of the Project area (2001), and a recent (2017) iNaturalist research grade observation is approximately 1 mile from the BSA. Due to the presence of potentially suitable habitat and local recent occurrences, the species has a low to moderate potential to occur within the BSA.

Southern California Legless Lizard

The southern California legless lizard (*Anniella stebbinsi*) is not a State or Federally listed species but is a CDFW SSC. It is a secretive fossorial lizard common in suitable habitat in the Coast Ranges from Contra Costa County south to the Mexican border. The species is common in several habitats, but especially in coastal dune, valley-foothill riparian, chaparral and coastal scrub types. Little is known regarding the specific habitat requirements for reproduction; however, mating activities are known to occur in late spring or early summer with live young born in September, October or even November. The species elevation range occurs from near sea level to approximately 6,000 ft. in the Sierra (Zeiner et al. 1988-1990).

No southern California legless lizard was observed during the September 27, 2019, biological survey. The BSA contains Santiago Creek, and the stream surroundings may provide suitable moist habitat with sandy soils and cover objects such as leaf litter from oaks, sycamores, willow and alder. The nearest historic (1970) CNDDDB occurrence of the species is approximately 2.7 miles northwest of the Project area, and a recent (2019) iNaturalist research grade observation is approximately 6.2 miles east of the BSA. Due to the presence of potentially suitable habitat, with historic and recent presumed extant occurrences, the species is considered to have a low to moderate potential to occur within the BSA.

Two-Striped Gartersnake

The two-striped gartersnake (*Thamnophis hammondi*) is not a State or Federally listed species but is a CDFW SSC. It is distributed from the southeastern slope of the Diablo Range and the Salinas Valley south along the South Coast and Transverse ranges to the Mexican border, and on Santa Catalina Island. The species is highly aquatic, foraging primarily in and along streams. The species is diurnal, using mammal burrows, crevices, and surface objects for nocturnal retreats. Mating typically occurs soon after spring emergence and young are live born in late summer in secluded sites. The species elevation range occurs from sea level to approximately 8,000 ft. (Zeiner et al. 1988-1990).

No two-striped gartersnake was observed during the September 27, 2019, biological survey. The BSA contains Santiago Creek, and the stream surroundings may provide suitable habitat for the species. The nearest CNDDDB occurrence of the species is approximately 0.5-mile northwest of the Project area (2003), and a recent (2018) iNaturalist research grade observation is approximately 3.5 miles northeast of the BSA. Due to the presence of potentially suitable habitat and recent presumed extant occurrences, the species is considered to have a low to moderate potential to occur within the BSA.

Western Pond Turtle

The western pond turtle (WPT) is not a State or Federally listed species but is a CDFW SSC. WPTs are native to the west coast and are found from Baja California, Mexico north through Klickitat County, Washington. The WPT is a fully aquatic turtle, inhabiting ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. The species requires suitable basking sites such as logs, rocks and exposed banks and associated upland habitat consisting of sandy banks or grassy open fields for reproduction. The species is

omnivorous, consuming aquatic wildlife and vegetation. The WPT is known to hibernate underwater beneath a muddy bottom in colder climates and reproduce from March to August. Nests are generally found in flat areas with low vegetation and dry, hard soil (Zeiner et al. 1988-1990).

No western pond turtle was observed during the September 27, 2019 biological survey. The BSA contains Santiago Creek, an intermittent stream which does not provide permanent aquatic habitat for the species. However, the stream may provide habitat from fall to spring when the stream does carry water. There are multiple presumed extant occurrences within 5 miles of the BSA. Due to the presence of potentially suitable habitat and presumed extant occurrences, the species is considered to have a low to moderate potential to occur within the BSA.

Project Impacts

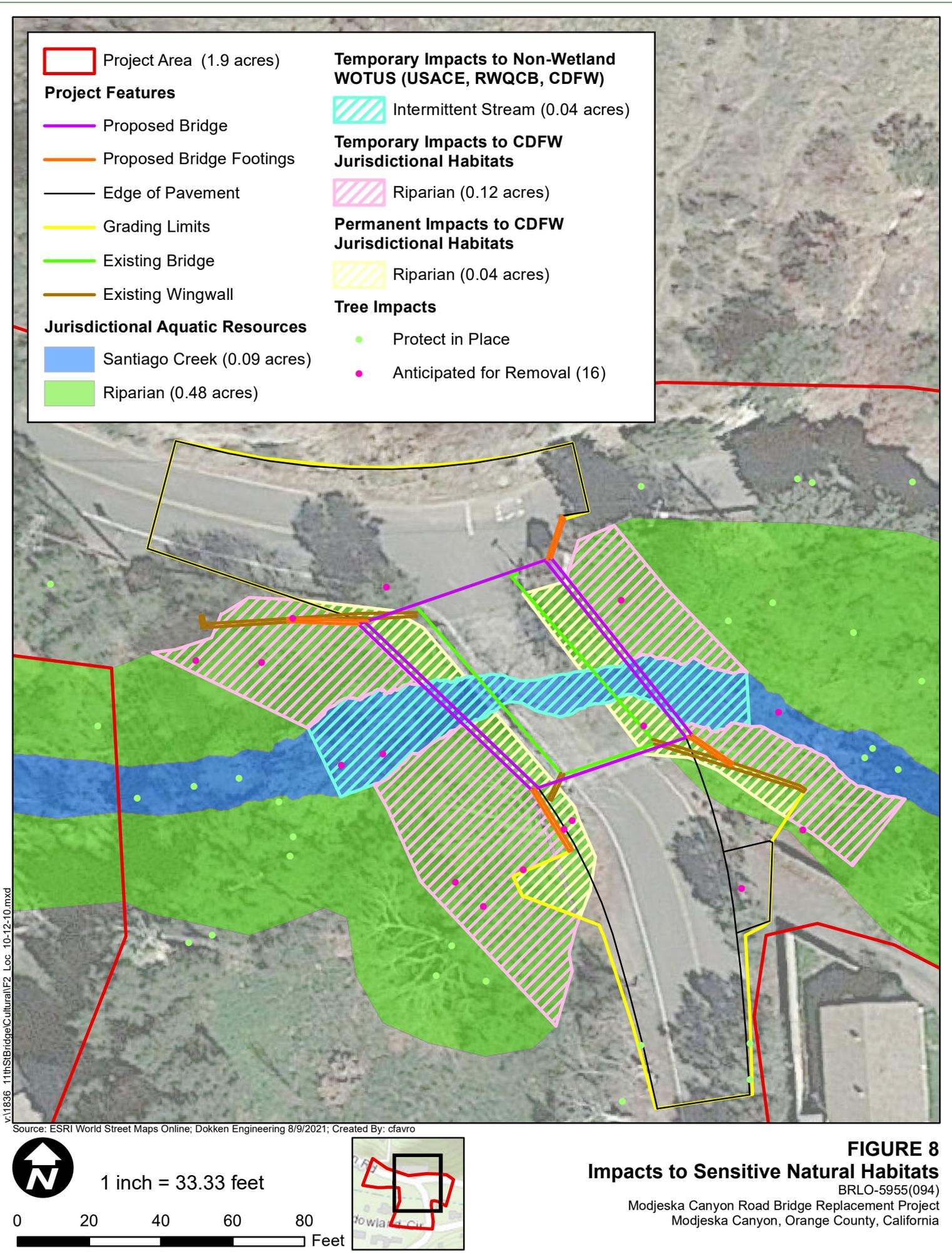
Construction activities within Santiago Creek would contribute to temporary impacts to the creek and temporary and permanent impacts to the adjacent riparian woodland habitat that may be utilized by special-status reptile species. Temporary impacts would be limited to temporary ground disturbance associated with construction activities. The Project will have approximately 0.04 acres (120 linear feet) of temporary impacts to Santiago Creek and approximately 0.12 acres of temporary impacts and approximately 0.04 acres of permanent impacts to riparian woodland habitat. Minimization and mitigation measures **BIO-1** through **BIO-8** have been incorporated into the Project design to avoid impacts to special reptile species.

Response to Question b): Less than Significant with Mitigation Incorporated. The Project would have less than significant impact with mitigation incorporated on riparian habitat or other sensitive natural communities (Figure 8. Sensitive Natural Habitat). Approximately 16 trees, within the riparian woodland are anticipated to be removed to allow for construction access and constructability of the Project. However, all tree resources will be evaluated to determine where trees may remain protected in place without damaging essential root systems within the tree drip lines. The Project has been designed to minimize temporary and permanent impacts to riparian woodland habitat within the Project impact area to the maximum extent practicable. Prior to construction, regulatory permits will be obtained from USACE, RWQCB, and CDFW. Compensatory mitigation will be implemented in accordance with regulatory permits. In addition to all avoidance and minimization measures specified in regulatory permits, BMPs and measures **BIO-1** through **BIO-7** will be incorporated into the design to minimize construction impacts to riparian woodland within the Project's impact area. Additionally, compensatory measures **BIO-8** and **BIO-9** will be implemented to compensate for temporary and permanent impacts to natural communities of special concern.

Table 11: Anticipated Tree Removal

Species	# of Stems	DBH
Black walnut (<i>Juglans nigra</i>)	1	9
California sycamore (<i>Platanus racemosa</i>)	1	30
California sycamore (<i>Platanus racemosa</i>)	4	8, 7, 6, 4
Coast live oak (<i>Quercus agrifolia</i>)	1	15
Coast live oak (<i>Quercus agrifolia</i>)	1	22
Coast live oak (<i>Quercus agrifolia</i>)	1	34
Coast live oak (<i>Quercus agrifolia</i>)	1	34
Eucalyptus (<i>Eucalyptus globulus</i>)	2	26,14

Species	# of Stems	DBH
Olive (<i>Olea europaea</i>)	1	20
Pacific willow (<i>Salix lucida</i>)	1	6
White alder (<i>Alnus rhombifolia</i>)	4	8,7,10,10
White alder (<i>Alnus rhombifolia</i>)	1	16
White alder (<i>Alnus rhombifolia</i>)	2	11,13
White alder (<i>Alnus rhombifolia</i>)	2	13, 21
White ash (<i>Fraxinus americana</i>)	3	4,4,2
White ash (<i>Fraxinus americana</i>)	1	8



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Source: ESRI World Street Maps Online; Dokken Engineering 8/9/2021; Created By: cfavro

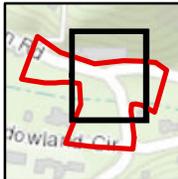
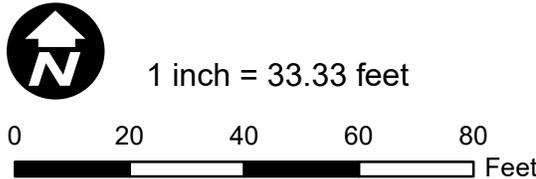
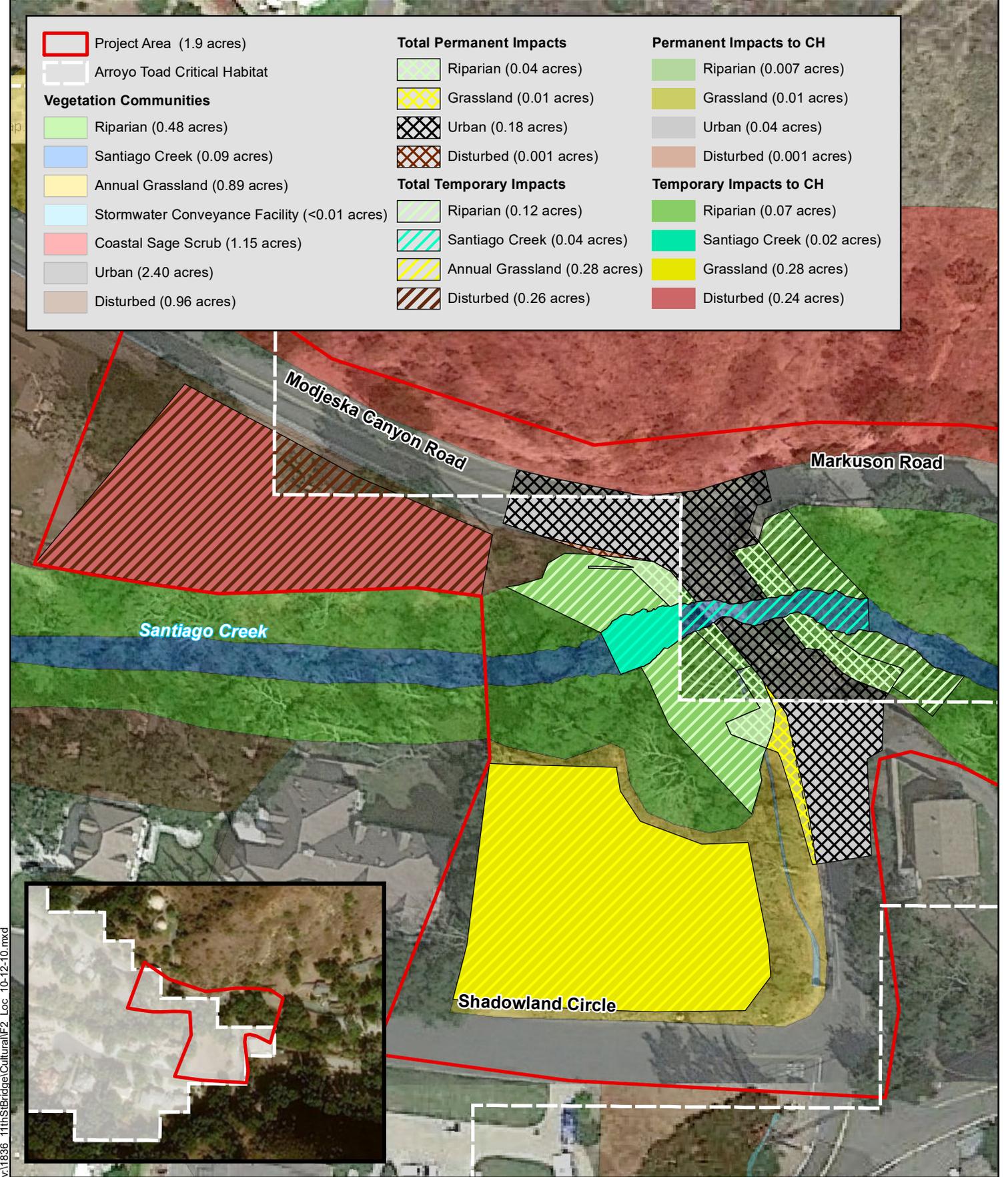


FIGURE 8
Impacts to Sensitive Natural Habitats
 BRLO-5955(094)
 Modjeska Canyon Road Bridge Replacement Project
 Modjeska Canyon, Orange County, California



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Source: ESRI World Street Maps Online; Dokken Engineering 9/16/2021; Created By: cfavro



1 inch = 58 feet

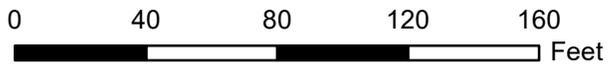


FIGURE 9
Impacts to Arroyo Toad Critical Habitat

BRLO-5955(094)
 Modjeska Canyon Road Bridge Replacement Project
 Modjeska Canyon, Orange County, California

Response to Question c): Less than Significant with Mitigation Incorporated. The Project would have less than a significant impact with mitigation incorporated on state or federally protected wetlands. During aquatic resource delineation efforts, no seasonal wetlands were identified within the BSA. The only aquatic features present within the BSA include Santiago Creek and the stormwater conveyance facility. Construction activities within Santiago Creek would be limited to temporary ground disturbance associated with construction on the new bridge structure, and any diversion or dewatering activities necessary to avoid work occurring within flowing waters. Due to these temporary construction activities, the Project is anticipated to have approximately 0.04 acres of temporary impacts to the Santiago Creek channel, a water of the U.S. and State, and CDFW jurisdictional habitat. Permanent impacts to Santiago Creek, as a result of the proposed Project, are not anticipated. Additionally, the implementation of BMPs and measures **BIO-1** through **BIO-5**, **BIO-7**, and **BIO-8** would serve to minimize construction impacts within Santiago Creek as well as mitigate for the anticipated temporary impacts at the appropriate ratio. Permits will also be obtained from CDFW and RWQCB due to the temporary impacts to the creek.

Response to Question d): Less than Significant Impact. The Project would have less than a significant impact on movement of native fish and wildlife species and would not impede wildlife corridors or nursery sites. Santiago Creek runs east to west through the BSA. The Santiago Creek corridor may provide habitat connectivity for terrestrial and aquatic species; however, Santiago Creek is not identified as an Essential Connectivity Area by CDFW. The Project area is listed as Rank 3 on the CDFW Terrestrial Connectivity Dataset, which is one of four key components of the overall CDFW Area of Conservation Emphasis suite for terrestrial conservation information along with Terrestrial Biodiversity, Significant Habitats, and Climate Resilience. Rank 3 identifies areas that have connectivity importance, but have not been identified as channelized areas, specific species corridors, or habitat linkages at this time (CDFW 2020). Construction of the proposed Project is not anticipated to impact the habitat connectivity of this area and existing essential wildlife corridors will be maintained.

Response to Question e): Less than Significant with Mitigation Incorporated. The Project would have less than a significant impact on local policies and ordinances that protect biological resources. The Project is consistent with local regulations involving the County of Orange General Plan. To protect the wide variety of plants, animals and their habitats, the County has enacted a series of policies with the goal of addressing the preservation, management, and utilization of Orange County's natural resources during the planning process, including fish and wildlife habitat protections, open space and recreation conservation, water and air resources and water quality objectives, and regulations for vegetation removal in areas within the General Plan Resource Element (Orange County 2013). The riparian woodland present within the BSA is considered a sensitive natural community by CDFW and Orange County General Plan. Approximately 16 trees within the riparian woodland are anticipated to be removed to allow for construction access and constructability of the Project. However, all tree resources will be evaluated to determine where trees may remain protected in place without damaging essential root systems within the tree drip lines. The Project has been designed to minimize temporary and permanent impacts to riparian woodland habitat within the Project impact area to the maximum extent practicable. Prior to construction, regulatory permits will be obtained from USACE, RWQCB, and CDFW. Compensatory mitigation will be implemented in accordance with regulatory permits. In addition to all avoidance and minimization measures specified in regulatory permits, BMPs and measures **BIO-1** through **BIO-7** will be incorporated into the design to minimize construction impacts to riparian woodland within the Project impact area. Additionally, compensatory measures **BIO-8** and **BIO-9** will be implemented to compensate for temporary and permanent impacts to natural communities of special concern.

Response to Question f): Less than Significant Impact. The Project would have less than a significant impact on adopted Habitat Conservation Plans, Natural Community Conservation Plans and other approved conservation plans. The Central/Coastal Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP) (County of Orange 1996a) was prepared by the Orange County in cooperation with California Department of Fish and Game (CDFG, now CDFW) and USFWS. The NCCP/HCP focuses on creating a multiple-species, multiple habitat subregional Reserve System and implementing a long-term “adaptive management” program that will protect coastal sage scrub and other habitats and species located within the coastal sage scrub habitat mosaic, while providing for economic uses that will meet the social and economic needs of the people of the subregion.

The Project falls within the NCCP/HCP Non-Reserve Open Space. The Non-Reserve Open Space designate regional open spaces that were in public ownership prior to adoption of the NCCP/HCP. These open spaces are not subject to the development requirements associated with the Reserve system, but they are recognized as integral components of the overall subregional conservation strategy. According to Section 4.4.3.1 of the NCCP/HCP Plan, future proposals to convert coastal sage scrub of “Take” covered species within the permanent non-reserve open space are not authorized by the NCCP/HCP and are not mitigated by the NCCP/HCP Project. Any proposed impacts involving incidental take will require separate review by CDFW and USFWS in the same manner as provided for in “Existing Use Areas” to determine compliance with the applicable state and federal species protection laws/regulation (County of Orange 1996). Overall, although potential Project impacts to biological resources and special-status species is not covered under the NCCP/HCP separate consultation with wildlife agencies will be initiated and appropriate mitigation will be implemented.

Avoidance, Minimization, and/or Mitigation Measures

BIO-1: Prior to the start of construction activities, the Project limits in the vicinity of Santiago Creek and associated riparian areas shall be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into waters. Plans for the ESA fencing including maps of the project area and fencing limits shall be provided to the Carlsbad Fish & Wildlife Office (CFWO) at least 5 days prior to initiating project impacts. The fencing shall be inspected by the Contractor before the start of each workday and maintained by the Contractor until completion of the Project. The Project biologist will periodically inspect the ESA to ensure sensitive locations remain undisturbed.

BIO-2: Every individual working on the Project must attend a biological awareness training session delivered by a qualified biologist. This training program shall include information regarding special-status species (including pertinent bird, amphibian, mammal, and reptile species along with photographs), sensitivity of the species to human activities, penalties for violations of Federal and State laws, and the importance of avoiding impacts to wildlife species individuals and associated habitat.

The training shall include species identification characteristics, BMPs to be implemented, Project-specific avoidance measures that must be followed, and the steps necessary if the species is encountered at any time. Personnel would attend biological awareness training prior to working within the Project area. The biological awareness training would include a description of special-status species and sensitive habitats and identify mitigation measures that must be complied with.

BIO-3: Contract specifications will include the following best management practices (BMPs), where applicable, to reduce erosion during construction:

- Implementation of the Project shall require approval of a site-specific Storm Water Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) that would implement effective measures to protect water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques.
- Existing vegetation will be protected in place where feasible to provide an effective form of erosion and sediment control.
- Roughening and terracing will be implemented to create unevenness on bare soil through the construction of furrows running across a slope, creation of stair steps, or by utilization of construction equipment to track the soil surface. Surface roughening or terracing reduces erosion potential by decreasing runoff velocities, trapping sediment, and increasing infiltration of water into the soil, and aiding in the establishment of vegetative cover from seed.
- Soil exposure must be minimized through the use of temporary BMPs, groundcover, and stabilization measures.
- The contractor must conduct periodic maintenance of erosion and sediment-control measures.

BIO-4: To conform to water quality requirements, the Project must implement the following:

- Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must be a minimum of 50 feet from surface waters. Any necessary equipment washing must occur where the water cannot flow into surface waters. The Project specifications will require the contractor to operate under an approved spill prevention and clean-up plan;
- Construction equipment will not be operated in flowing water;
- Construction work must be conducted according to site-specific construction plans that minimize the potential for sediment input to surface waters;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering surface waters;
- Equipment used in and around surface waters must be in good working order and free of dripping or leaking contaminants; and,
- Any concrete rubble, asphalt, or other debris from construction must be taken to an approved disposal site.

BIO-5: During construction, water diversion measures (e.g., sheet piles, sandbags or coffer dams) will be utilized to prevent water from entering the work area when conducting debris removal activities within the stream channel.

No work activities shall occur within flowing water within the OHWM of Santiago Creek. Once debris removal activities have occurred the creek channel will be graded back to pre-Project conditions.

Immediately upon completion of in-channel work, temporary fills (as needed), and any water diversion materials will be removed in a manner that minimizes disturbance to downstream flows and water quality.

BIO-6: Where feasible, riparian vegetation within temporary construction zones would be cleanly cut to ground level and then covered with a layer of clean gravel or topsoil as necessary to protect plant viability and prevent damage to remaining root structures during construction.

BIO-7: The Project Biologist must be approved by the Carlsbad Fish and Wildlife Office (CFWO) and will be on site: (a) during all vegetation clearing, and (b) weekly during project construction within 500 feet of gnatcatcher and vireo habitat and arroyo toad critical habitat to monitor compliance with conservation measures. The biologist's name, contact information, and work schedule on the project must be submitted to the CFWO at least 15 working days prior to initiating project impacts. The Project Biologist will be available during pre-construction and construction phases to address protection of sensitive biological resources, monitor ongoing work, and maintain communications with construction personnel to facilitate the appropriate and lawful management of issues relating to biological resources.

The Project biologist shall submit a final report to the CFWO within 120 days of project completion including photographs of impact areas and adjacent habitat and documentation that general compliance with conservation measures was achieved. The report will list the number and location of listed species observed, observed listed species behavior, and remedial measures employed to avoid and minimize impacts to listed species. Raw field notes should be available upon request by the CFWO.

BIO-8: All temporary impacts to federal and state jurisdictional waters, riparian woodland and ARTO Critical Habitat during Project construction will be restored at a 1:1 ratio and will be re-contoured to preconstruction conditions and seeded with a native seed mix. Where possible, vegetation will be trimmed rather than fully removed with the guidance of the Project biologist. A restoration plan will be developed and submitted to the Carlsbad Fish & Wildlife Office. The plan will be implemented for a minimum of 5 years unless success criteria are met earlier.

If maintenance of a riparian area occupied by vireo occurs within the nesting season, a qualified biologist will survey for vireos. Surveys will consist of three visits separated by 2 weeks. Restoration work will be allowed to continue during surveys. However, if vireos are found during visits, a qualified biologist will notify the Carlsbad Fish & Wildlife Office to identify measures to avoid and/or minimize effects.

BIO-9: The County shall replant any mature native and non-native trees removed from within natural communities of special concern at a 2:1 ratio on-site or within the Santa Ana River watershed, due to the extent of existing development and minimal impact to native habitats resulting from the proposed Project.

BIO-10: A pre-construction clearance survey for special status amphibian and reptile species shall be conducted 24-hours prior to vegetation clearing and/or initiation of construction activities. If any special status wildlife species or wildlife is found, the Project biologist shall relocate the wildlife

downstream in the appropriate habitat. If a lapse in Project-related work of 15 days or longer occurs, another focused survey shall occur.

BIO-11: As a first order of construction, the Project contractor shall install wildlife exclusion fencing (WEF) along the Project boundaries within suitable habitat prior to commencement of construction activities or staging of equipment, in order to prevent special status amphibian and reptile species individuals from entering the Project area during construction activities.

- WEF shall consist of taught silt fencing supported by wooden stakes on the Project side only.
- WEF shall be buried a minimum of six (6) inches below ground and soil shall be compacted against the sides of the fence for its entire length to prevent special status species from passing under the fence.
- WEF shall extend 12 to 18 inches above the ground.
- The contractor shall inspect the WEF daily, and WEF shall be maintained, and repaired where necessary, throughout construction to ensure that it is functional and without defects, that the fencing material is taught and that the bottom edge of the fencing material remains buried.
- The Project biologist will periodically inspect the WEF to ensure it remains functional and appropriately maintained throughout construction.

BIO-12: Prior to installation of WEF, the Project biologist shall inspect the Project area for wildlife to prevent entrapment within the Project area. If any special status wildlife species or wildlife is found, the Project biologist shall relocate the wildlife downstream in the appropriate habitat. If a lapse in Project-related work of 15 days or longer occurs, another focused survey shall occur.

BIO-13: All construction pipes, culverts, or similar structures that are stored in the Project area for one or more overnight periods shall be either securely capped prior to storage or thoroughly inspected by the contractor and/or the Project biologist for special status wildlife species or other animals before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If any special status wildlife species or wildlife is found within WEF, construction activities in the vicinity shall cease and the Project biologist shall be notified to relocate the wildlife to suitable habitat outside of the Project area. Only the approved Project biologist shall handle or relocate special status wildlife.

BIO-14: To prevent inadvertent entrapment of the special status wildlife species or other animals during construction, the Project biologist and/or construction foreman/manager shall ensure all excavated, steep-walled holes or trenches more than six inches deep are provided with one or more escape ramps constructed of earthen fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals by the Project biologist and/or construction foreman/manager.

BIO-15: Vegetation removal and clearing and grubbing of native habitats shall occur outside of the coastal California gnatcatcher and least Bell's vireo nesting season (February 1 to September 1).

BIO-16: If vegetation removal is required during the migratory bird nesting season (February 1 to September 1), a pre-construction nesting bird survey must be conducted within 7 days prior to

vegetation removal. Within 2 weeks of the nesting bird survey, all vegetation cleared by the Project biologist will be removed by the contractor.

A minimum 300-foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 500-foot no-disturbance buffer will be established around any nesting raptor or CESA/FESA listed species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the Project biologist who is approved by the wildlife agencies) in the buffer area until a qualified biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the Project biologist who is approved by the wildlife agencies.

- BIO-17:** If any noise generating construction activities above the typical background noise levels within the Project area are required during the migratory bird nesting season (February 1 to September 1), the Project biologist will monitor construction activities and any known identified nest sites within or adjacent to the Project area to minimize disturbance of nesting migratory birds. If the Project biologist suspects that these measures are ineffective, culpable activities within 500 feet of active nesting territories until nesting activity is completed and fledglings are no longer in the area or until effective avoidance and minimization measures can be implemented.
- BIO-18:** Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds. Special care will be taken during transport, use, and disposal of soils containing invasive weed seeds, and weedy vegetation removed during construction will be properly disposed of to prevent spread into areas outside of the construction area.
- BIO-19:** All hydroseed and plant mixes must consist of a Project biologist approved plant palette seed mix of native species sourced locally to the Project area.

4.9 Cultural Resources <i>Would the Project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Regulatory Setting

CEQA established statutory requirements for establishing the significance of historical resources in Public Resources Code (PRC) Section 21084.1. The CEQA Guidelines (Section 10564.5[c]) also require consideration of potential Project impacts to "unique" archaeological sites that do not qualify as historical resources. The statutory requirements for unique archaeological sites that do not qualify as historical resources are established in PRC Section 21083.2. These two PRC sections operate independently to ensure that significant potential effects on historical and archaeological resources are considered as part of a Project’s environmental analysis. Historical resources, as defined in Section 15064.5 as defined in the CEQA regulations, include 1) cultural resources listed in or eligible for listing in the California Register of Historical Resources (California Register); 2) cultural resources included in a local register of historical resources; 3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in one of several historic themes important to California history and development.

Under CEQA, a Project may have a significant effect on the environment if the Project could result in a substantial adverse change in the significance of a historical resource, meaning the physical demolition, destruction, relocation, or alteration of the resource would be materially impaired. This would include any action that would demolish or adversely alter the physical characteristics of an historical resource that convey its historic significance and qualify it for inclusion in the California Register or in a local register or survey that meets the requirements of PRC Section 5020.1(l) and 5024.1(g). PRC Section 5024 also requires state agencies to identify and protect state-owned resources that meet National Register of Historic Place (National Register) listing criteria. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocation, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible for registration as California Historical Landmarks.

CEQA and the CEQA Guidelines also recommend provisions be made for the accidental discovery of archaeological sites, historical resources, or Native American human remains during construction (PRC Section 21083.2(i) CCR Section 15064.5[d and f]).

Affected Environment

The Area of Potential Effect (APE) was established as the area of direct and indirect effects which encompasses the 2.0-acre APE (see Figure 3. Project Features). The APE includes potential staging areas, construction areas, vegetation/tree removal, temporary construction easements, and utility relocation. The approximate limits of the APE include a 230-foot-long segment of Modjeska Canyon Road west of the existing limits of the Modjeska Canyon Road Bridge, a 200-foot-long segment of Markuson Road east of the existing Modjeska Canyon Road Bridge, a 190-foot-long segment of Modjeska Canyon Road south of the existing Modjeska Canyon Road Bridge, a 220-foot-long segment of Shadowland Circle, and approximately 300 feet of Santiago Creek.

A record search for the APE and a one-mile radius surrounding the APE was obtained from the South Central Coastal Information Center (SCCIC), California State University, Fullerton on September 26, 2019. The search examined the OHP Historic Properties Directory, OHP Determinations of Eligibility, *California Inventory of Historical Resources*, Historical Literature and Maps, Caltrans Bridge Inventory, GLO Maps, Local Inventories, and Soil Survey Maps. The record search revealed 15 resources within the one-mile record search boundary, but no resources within the APE. Two surveys in the past had occurred within the APE: one was a large overarching inventory that encompassed thousands of acres and did not detail surveys within the APE, and the second was a linear survey of a power line that ran through the APE. Fifty eight surveys have occurred within the one-mile search radius. An archaeological field survey of the APE was conducted on September 27, 2019. The pedestrian survey was conducted at roughly 5-meter transect intervals. Visibility varied in areas with vegetation coverage. No cultural resources were identified within or immediately adjacent to the APE. The Archaeological Survey and Historic Property Survey Reports (May 2020) document the findings of the research.

Response to Question a): Less than Significant Impact. An Area of Potential Effect (APE) was established which encompasses 2.0 acres. The approximate limits include a 230-foot-long segment of Modjeska Canyon Road west of the existing limits of the bridge, a 200-foot-long segment of Markuson Road east of the existing bridge, a 190-foot-long segment of Modjeska Canyon Road south of the existing bridge, a 220-foot-long segment of Shadowland Circle, and approximately 300 feet of Santiago Creek. The vertical APE extends approximately 3 feet deep for road reconstruction and approximately 10 feet deep for excavation of the bridge abutments.

A record search and pedestrian survey revealed no resources within the APE and, therefore, a Finding of No Historic Properties Affected has been determined.

Response to Question b): Less than Significant with Mitigation Incorporated. A pedestrian survey was conducted at roughly 5-meter transect intervals; no cultural resources were identified within or immediately adjacent to the APE. A record search conducted at the South-Central Coastal Information Center (SCCIC) and the Native American Heritage Commission returned negative results for the presence of known cultural resources within the APE. Measures **CUL-1** and **CUL-2** will be implemented to minimize impact should an archaeological resource be encountered.

Response to Question c): Less than Significant with Mitigation Incorporated. The Project does not anticipate any disturbance of human remains. If human remains are encountered, work would halt, and

the County coroner would be notified immediately. An archaeologist would also be contacted to evaluate the situation. If the human remains are of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of such identification.

Avoidance, Minimization, and/or Mitigation Measures

- CUL-1:** Prior to construction, environmental awareness training shall be provided to all construction workers onsite regarding the possibility of encountering subsurface cultural resources.
- CUL-2:** If previously unidentified cultural materials are unearthed during construction, work shall be halted in that area until a qualified archaeologist can assess the significance of the find and develop a plan for documentation and removal of resources, if necessary. Additional archaeological survey will be needed if Project limits are extended beyond the present survey limits.
- CUL-3:** Section 5097.94 of the Public Resources Code and Section 7050.5 of the California Health and Safety Code protect Native American burials, skeletal remains and grave goods, regardless of age and provide method and means for the appropriate handling of such remains. If human remains are encountered, California Law requires that work shall halt in that vicinity and the Orange County Coroner shall be notified immediately to assess the remains. If the coroner determines the human remains to be of Native American origin, the coroner must notify the Native American Heritage Commission (NAHC) within twenty-four hours of such identification. The NAHC shall then determine the Most Likely Descendant (MLD) of the human remains and contact the MLD immediately. The County, the MLD, and a professional archaeologist retained by the County shall then consult to determine the appropriate plans for treatment and assessment of the human remains and any associated grave goods.

4.10 Energy <i>Would the Project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Response to Impact Question a): Less than Significant Impact. The Project would replace the existing bridge with a 65'-2" long single span prestressed, precast concrete I girder bridge. The Project would not permanently alter energy use, as it would not increase the number of vehicle travel lanes or increase carbon emissions; therefore, direct energy use would involve the short-term use of energy for construction activities.

Construction activities include land clearing, grading, activities for drainage and utilities, and paving (See Section 3.9 for construction phases). Construction of the Project would induce short-term consumption of energy resources in the form of combustion of fossil fuels in construction vehicles, worker commuter vehicles, and construction equipment. There are limitations on idling vehicles, which if left unchecked, would be a large contributor to wasting energy resources. California regulation (13 CCR 2449[d][3], 2485) will limit idling of diesel-powered equipment. Since the cost of fuel is high, contractors are incentivized to be as energy efficient as possible. Construction is estimated to result in a short-term consumption of energy, representing a small demand on local and regional fuel supplies that would be easily accommodated and would be temporary. The Project would not result in an inefficient, wasteful, and unnecessary consumption of energy, and the Project's impact on energy would be less than significant.

Response to Impact Question b): No Impact. The Project is a bridge replacement and, due to the nature of the Project, will not conflict with or obstruct any state or local plan for renewable energy or energy efficiency. Fuel consumption from construction vehicles and equipment for the Project would be temporary and would represent a negligible increase in regional energy consumption. Once operational, the energy requirements for the Project would be similar to existing energy usage. Therefore, the Project would result in no impact local plans for renewable energy or energy efficiency.

4.11 Geology and Soils

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal system where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Affected Environment

The Project area is located near several Pre-Quaternary faults (older than 1.6 million years) or faults without recognized Quaternary displacement.

Response to Impact Question a (i): Less than Significant Impact. According to the Department of Conservation California Earthquake Hazards Zone Application map, no fault zone crosses or occurs within the Project area. The nearest fault line is the Glen Ivy South Fault approximately 9 miles northeast of the Project. Due to the distance between the Project area and the Eagle Fault, impacts will be less than significant.

Response to Question a(ii): Less than Significant Impact. The existing Modjeska Canyon Bridge was built in 1935 and is considered Functionally Obsolete due to narrow road width. Since the proposed Project will replace the existing bridge, this would improve safety conditions for vehicular traffic. The Project would adhere to Caltrans’ seismic design criteria and construction standards. Therefore, impacts due to seismic forces and displacements are avoided or minimized to the extent feasible. Impacts are less than significant.

Response to Question a(iii): Less than Significant Impact. According to the Department of Conservation California Earthquake Hazards Zone Application map, the Project is within a liquefaction zone. The proposed Project would be required to comply with local, state, and federal regulations intended to minimize the impacts of liquefaction to the extent feasible. Additionally, the Project will adhere to Caltrans’ seismic design criteria and construction standards. Impacts associated with seismic-related ground failure, including liquefaction, are less than significant.

Response to Question a(iv): Less than Significant Impact. According to the Department of Conservation California Earthquake Hazards Zone Application map, Project location falls within a landslide zone. However, with adherence to Caltrans’ seismic design criteria and construction standards, impacts from landslides would be less than significant.

Response to Impact Question b): Less than Significant Impact. The National Resources Conservation Service (NRCS) identifies within the BSA consists of Riverwash (63.7% of the BSA) and Sorrento loam, 2 to 9 percent slopes, warm MAAT, MLRA 19 (36.3% of the BSA) (NRCS 2020). The erodibility factor for this soil is K=0.32, indicating that it is moderately susceptible to detachment and may produce moderate runoff (Water Quality Planning Tool, 2021). Demolition and construction activities would disturb top soil that could be exacerbated by stormwater, wind, and/or other construction activities. However, due to the

limited footprint of the Project area and measures within the Stormwater Pollution Prevention Plan (SWPPP), erosion due to surface runoff and topsoil loss is not expected in paved and/or properly slope areas with controlled surface drainage facilities. Grading and earthwork during construction may result in erosion and sedimentation. Erosion and loss of top soil would be a less than significant impact with mitigation. This impact will be mitigated with applicable BMPs contained in the Orange County Stormwater Program's Construction Runoff Guidance Manual and measures listed in 4.14 Hydrology and Water Quality.

Response to Impact Question c): Less than Significant Impact. The topography within the Project area is generally flat. Soils within the Project area consist of Riverwash and Sorrento loam, 2 to 9 percent slopes, warm MAAT, MLRA 19 (NRCS 2020). Geology is comprised of marine sedimentary and metasedimentary, described as Upper Cretaceous sandstone, shale, and conglomerate. According to the Department of Conservation California Earthquake Hazards Zone Application map, the Project area is within a liquefaction zone. With adherence to Caltrans' seismic design criteria and construction standards, impacts from on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse is not anticipated.

Response to Impact Question d): No Impact. The Uniform Building Code (1994) defines expansive soils to understand how such soils can affect structures and foundations. Expansive soils contain significant amounts of clay particles that have the ability to give up water (shrink) or take on water (swell). When these soils swell, the change in volume can exert significant pressures on loads that are placed on them and can result in structural distress and/or damage. According to the NRCS Soil Report and the Caltrans Water Quality Planning Tool, soils within the Project area are classified as Hydraulic Group C and D (USDA, 2014). Group C soils have slow infiltration rates and Group D are clay soils with a low infiltration rate and high runoff potential. The proposed project would be designed and constructed in accordance with the Bridge Design Specifications established by Caltrans and would be designed in accordance with all applicable design provisions, which dictate specifications to ensure structural integrity. Therefore, impacts would be less than significant.

Response to Impact Question e): No Impact. The proposed Project involves replacement of an existing bridge and does not include septic tanks or an alternative wastewater disposal system on the site. Therefore, the Project would not result in an impact to soils pertaining to the ability to support the use of septic tanks.

Response to Impact Question f): Less than Significant with Mitigation Incorporated. Paleontological sites are abundant in South Orange County, along the coast, and in creek areas. According to Figure VI-9 in the Orange County General Plan Resources Element, the Project area falls within three sensitivity areas – El Toro District, Plano Trabuco (Southern Santa Ana Mountains), Northern Santa Ana Mountains. These sensitivity areas are predicated primarily on the underlying geological formations. The Project is within Rural/ Suburban Residential use; however, it is possible that intact fossil deposits are present at subsurface levels and could be uncovered during ground-disturbing activities. Measures **GEO-1** and **GEO-2** will be implemented to mitigate any unanticipated discoveries during construction. Therefore, impacts related to paleontological resources are anticipated to be Less than Significant with Mitigation Incorporated.

Avoidance, Minimization, and/or Mitigation Measures

GEO-1: Paleontological Monitoring. A qualified paleontologist (the “Project Paleontologist”), as defined by the Society of Vertebrate Paleontology’s 2010 guidelines, shall be retained by the Contractor prior to the issuance of a grading permit. The Project Paleontologist will be on-call to monitor ground-disturbing activities and excavations on the Project site following identification of potential paleontological resources by Project personnel. If paleontological resources are encountered during implementation of the Project, ground-disturbing activities will be temporarily redirected from the vicinity of the find. The Project Paleontologist will be allowed to temporarily divert or redirect grading or excavation activities in the vicinity in order to make an evaluation of the find. If the resource is significant, Mitigation Measure GEO-2 shall apply.

GEO-2: Paleontological Treatment Plan. If a significant paleontological resource(s) is discovered, the qualified paleontologist shall develop a plan of mitigation which shall include salvage excavation and removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation in the find a local qualified repository, and preparation of a report summarizing the find. All recommendations will be made in accordance with the Society of Vertebrate Paleontology’s 2010 guidelines and shall be subject to review and approval by the County of Orange.

4.12 Greenhouse Gas Emissions <i>Would the Project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Regulatory Setting

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization’s Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years. These efforts are primarily concerned with the emissions of GHG related to human activity that include CO₂, CH₄, NO_x, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, HFC-23 (fluoroform), HFC-134a (s, s, s, 2 –tetrafluoroethane), and HFC-152a (difluoroethane).

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California’s GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80 percent below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that CARB create a plan, which includes market mechanisms, and implement rules to achieve “real, quantifiable, cost-effective reductions of greenhouse gases.” Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state’s Climate Action Team.

With Executive Order S-01-07, Governor Schwarzenegger set forth the low carbon fuel standard for California. Under this executive order, the carbon intensity of California’s transportation fuels is to be reduced by at least 10 percent by 2020.

Climate change and GHG reduction is also a concern at the federal level; however, at this time, no legislation or regulations have been enacted specifically addressing GHG emissions reductions and climate change. California, in conjunction with several environmental organizations and several other states, sued to force the EPA to regulate GHG as a pollutant under the Clean Air Act (Massachusetts vs. [EPA] et al., 549 U.S. 497 (2007)). The court ruled that GHG does fit within the Clean Air Act’s definition of a pollutant, and that the EPA does have the authority to regulate GHG. Despite the Supreme Court ruling, there are no promulgated federal regulations to date limiting GHG emissions.^[1]

^[1] <http://www.epa.gov/climatechange/endangerment.html>

According to Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate Change in CEQA Documents (March 5, 2007), an individual Project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a Project may participate in a potential impact through its incremental contribution combined with the contributions of all other sources of GHG. In assessing cumulative impacts, it must be determined if a Project's incremental effect is "cumulatively considerable." See CEQA Guidelines sections 15064(i)(1) and 15130. To make this determination the incremental impacts of the Project must be compared with the effects of past, current, and probable future Projects. To gather sufficient information on a global scale of all past, current, and future Projects in order to make this determination is a difficult if not impossible task.

The Project would build a new bridge that eliminates the one-lane bridge that currently causes vehicles to idle while waiting for other travelers to cross the bridge. The Project does not make improvements to the rural road to and from the bridge, thus does not increasing traffic on the road.

Response to Impact Question a): Less than Significant Impact. GHG emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by on-site construction equipment, and emissions arising from traffic delays due to construction. GHG emissions produced during operations are those that result from potentially increased traffic volumes or changes in automobile speeds. Construction activities are expected to generate CO₂ in quantities that would not individually or cumulatively contribute to a significant impact on the environment.

Short-Term Construction Emissions

Short-term construction emissions from the Project are anticipated. Emissions from construction equipment would include all equipment powered by gasoline and diesel engines. The RCEM model (Appendix A) estimates construction equipment effects of criteria pollutants including CO, NO_x, VOCs, directly emitted PM₁₀ and PM_{2.5}, and toxic air contaminants (TACs) such as diesel exhaust particulate matter. The RCEM also estimates the amount of greenhouse gas emissions that would result from construction equipment. These emissions would be temporary and limited to the immediate area surrounding the construction site and would not exceed SCAQMD construction emission thresholds. The RCEM model was calculated with the Project's construction anticipated to take approximately 8 months. The estimated amount of greenhouse gas emissions generated by construction of the Project are shown on Table 12 below.

Table 12: Estimated Construction Greenhouse Gas Emissions

	CO ₂ (Tons)	CH ₄ (Tons)	N ₂ O (Tons)	MT CO ₂ e (Metric Tons)
2023	27.29	0.00	0.00	25.58

Operational Emissions

The Project would not result in any operational increases in the number of automobiles in the traffic system, therefore, long-term operational emissions are not anticipated. The Project would not add any

additional travel lanes and its vehicle capacity would not change. Potential future maintenance or repair of the bridge may be necessary, but it would be short-term and temporary, and it would not result in a substantial source of greenhouse gas emissions.

Response to Impact Question b): Less Than Significant Impact. The Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emission. Currently, the County of Orange and SCAQMD have not adopted any GHG reduction measures that would apply to GHG emissions associated with the Project. No mandatory GHG regulations or finalized agency guidelines would apply to the Project. Therefore, impacts would be less than significant.

4.13 Hazards and Hazardous Materials <i>Would the Project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the Project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Regulatory Setting

Hazardous materials and hazardous wastes are regulated by many state and federal laws. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health, and land use.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976 and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during project construction.

Affected Environment

An Initial Site Assessment (ISA) was prepared in April 2021 by WRECO (Appendix G). During the site investigation, the proposed Project area was evaluated for the presence of Recognized Environmental Conditions (RECs) and/or Activity and Use Limitations (AULs), which are:

REC: "...the presence or the likely presence of any hazardous substances or petroleum hydrocarbons on the (Subject Property) that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum hydrocarbons into structures or into the ground, groundwater, or surface water of the subject property."

AUL: "...an explicit recognition by a federal, tribal, state, or local agency that residual levels of hazardous substances or petroleum hydrocarbons may be present on the property, and that unrestricted use of the property may not be acceptable."

The site is a rural area that has been used as grazing, wooded areas, residential use, and minor agriculture. The area remains predominantly comprised of dense natural forest areas, despite an increase in residential homes.

The ISA identified the following potential recognized environmental conditions (REC) including:

- Potential polychlorinated biphenyls (PCB) and heavy metals from pole-mounted transformers on wooden utility poles (potential arsenic, chromium, creosote, and pentachlorophenol) along Markuson Road to the northeast;
- Potential aerially deposited lead (ADL) in exposed soil south of the bridge, from historical vehicle emissions during the leaded gasoline era;
- Potential lead-based paint (LBP) on the metal railings on both sides of the bridge, and the yellow traffic striping;
- Potential asbestos-containing materials (ACM) within the bridge materials; and
- Potential for pesticides and heavy metals from the agricultural field to the southwest, within soil along Santiago Creek.

Table 13: Summary of RECs and Recommendations

Description	Evidence of REC Found	Recommended Actions
Agricultural Fields	Due to agricultural use of the land to the southwest, organochlorine pesticides (OCP), organophosphorous pesticides (OPP), and heavy metals may be present within soil in Santiago Creek.	Preliminary Site Investigation (PSI): -Soil sampling for OCP, OPP and heavy metals.
Aerially deposited lead (ADL)	There is potential for elevated levels of lead in exposed soil from historical vehicle emissions, since leaded gasoline was used through the 1970s and the shoulders of the roadway, south of the bridge, may contain ADL.	PSI: - Soil sampling for total lead
Utility Poles and Pole-mounted Transformers	Treated wood poles (utility poles) along the side of the road may contain a variety of chemicals (arsenic, chromium, copper, creosote, and pentachlorophenol (PAHs) that can runoff and impact soil. Pole-mounted transformers, located to the northeast of the bridge, may leach these constituents of concern into the soil and water.	PSI: - Soil sampling for polychlorinated biphenyls (PCBs), PAHs, and heavy metals. (If utility poles will be moved or replaced, abate transformers prior to construction)
Existing bridge structure may contain LBP and ACM.	Due to the age of the bridge, there is potential for LBP and ACM within the structure.	PSI: - Structural elements sampling for LBP and ACM

Response to Impact Question a): Less than Significant with Mitigation Incorporated. The Project would involve the use of heavy equipment for grading, hauling, and materials handling. Use of this equipment may require the use of fuels and other common materials that have hazardous properties (e.g., fuels are flammable). These materials would be used in accordance with all applicable laws and regulations and, if used properly, would not pose a hazard to people, animals, or plants. All refueling of construction vehicles and equipment would occur within the designated staging area for the Project. The use of hazardous materials would be temporary, and the Project would not include a permanent use or source of hazardous materials. Implementation of measure **BIO-4** will ensure that impacts will be less than significant with that mitigation incorporated.

Response to Impact Question b): Less than Significant with Mitigation Incorporated. According to the Initial Site Assessment (Appendix G), the following potential RECs, shown in Table 13, were observed. It is recommended that a PSI be conducted to test bridge materials for ACM and LBP and to test soils around the Project area. Upset and accident conditions involving the release of hazardous materials into the environment would not be significant based on background research of hazardous materials in the Project

vicinity and implementation of avoidance and minimization measures, such as the PSI. With the implementation of measures **HAZ-1** and **HAZ-2**, impacts will be less than significant.

Additionally, minor operations, maintenance activities, and minor roadway improvements such as repaving and restriping may be required during the life of proposed bridge. These activities could result in the release of hazardous materials. However, these activities would occur under the guidance of experienced professionals, who, in compliance with federal, state, and local regulations, would properly handle and dispose of hazardous materials.

Response to Impact Question c): No Impact. The Project is not located within 0.25 miles of an existing or proposed school. The closest school (Portola Hills Elementary School) is approximately 2 miles southeast of the Project area. No impacts are anticipated. Because there is no school located within a quarter mile of the project area, the Project would inherently have no hazardous material impact to the school. Any transportation of hazardous materials required for project construction or maintenance would comply with applicable federal, state and County regulations, the risk of a hazardous materials impact to a school is even further reduced. Therefore, the Project would result in no impact to hazardous emissions or handling hazardous materials.

Response to Impact Question d): No Impact. According to EnviroStor Database (2020), GeoTracker Database (2020), and Environmental Data Resources (2020) search, the proposed Project is not on a site included in the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, which is also known as the Cortese List. No sites in the Cortese List are in this area of Orange County. Therefore, the Project would result in no impact related to a hazardous waste site.

Response to Impact Question e): No Impact. The Project is not within an airport land use plan or within the vicinity of a privately-owned airport or airstrip. The closest public airport to the project site is Corona Municipal Airport located in Riverside County approximately 12.0 miles northeast of the Project site. No impacts to safety or noise within an airport land use planning area are anticipated.

Response to Impact Question f): Less than Significant with Mitigation Incorporated. The Project will eliminate vehicular access across this bridge during the short-term construction phase that would affect north/south and south/north connectivity. During the first stage of construction, a temporary bridge approximately 80 feet long will be placed within the footprint of the new bridge, reducing environmental and right of way impacts to the same as needed for only the new bridge. This will require the road to be closed to traffic for approximately 2 days while the existing bridge is removed and the temporary bridge is erected. Modjeska Grade Road will be utilized for traffic during this short road closure. For the second construction stage, one lane of alternating traffic is shifted to the new bridge, the temporary bridge is removed, and the remaining half of the new bridge is constructed. The proposed Project would have a less than significant impact during Project construction with the incorporation of an Emergency Plan and Traffic Management Plan; local fire response personnel will be informed of any transportation constraints of the bridge due to construction. See mitigation measures **WF-1** through **WF-6** under Section 4.24 Wildfire.

Response to Impact Question g): Less Than Significant Impact with Mitigation Incorporated. According to the California Fire Hazard Severity Zone Viewer Map, the Project is in a Very High Fire Hazard Severity Zone. The County General Plan Safety Element sets forth fire safety policies for the County. The following is related to the Proposed Project:

- **Goal 1:** Provide a safe living environment, ensuring adequate fire protection facilities and resources to prevent and minimize the loss of life and property fire.
 - **Policy 2:** Establish improved development standards for location of new construction, structural design, emergency vehicular access, and detection hardware.
 - **Policy 3:** To improve building code regulations to provide increased built-in fire protection.
 - **Policy 6:** To provide technical and policy information regarding structural and wildland fire hazards to developers, interested parties and the general public through all available media.

The proposed Project involves the replacement of the existing Modjeska Canyon Bridge. The Project would involve the use of heavy equipment for grading, hauling, and materials handling. Use of this equipment may require the use of fuels and other common materials that have hazardous properties (e.g., fuels are flammable). Also, should a wildland fire occur in the vicinity of the Project site the evacuation across the bridge due to a single travel lane could be affected during the construction phase. With the implementation of measures **WF-1** through **WF-6**, less than significant impacts would occur.

Avoidance, Minimization, and/or Mitigation Measures

See Biological Resources mitigation measure **BIO-4** and Wildfire mitigation measures **WF-1** through **WF-6**.

HAZ-1: A PSI is recommended to test for ADL, OCP, OPP, and heavy metals in soils and for LBP and ACM in the existing bridge structure prior to construction.

HAZ-2: Any leaking transformers observed during the course of the Project should be considered a potential polychlorinated biphenyl (PCB) hazard. A detailed inspection of individual electrical transformers was not conducted for this Phase I Environmental Site Assessment. However, should leaks from electrical transformers (that will either remain within the construction limits or will require removal and/or relocation) be encountered during construction, the transformer fluid should be sampled and analyzed by qualified personnel for detectable levels of PCB's. Should PCBs be detected, the transformer should be removed and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency. Any stained soil encountered below electrical transformers with detectable levels of PCB's should also be handled and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency.

4.14 Hydrology and Water Quality <i>Would the Project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner, which would:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) result in substantial erosion or siltation on- or offsite?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Regulatory Setting

Section 401 of the Clean Water Act (CWA) requires water quality certification from the State Water Resources Control Board (SWRCB) or from a Regional Water Quality Control Board (RWQCB) when the project requires a CWA Section 404 permit. Section 404 of the CWA requires a permit from the U.S. Army Corps of Engineers to discharge dredged or fill material into waters of the United States.

Along with CWA Section 401, CWA Section 402 establishes the National Pollutant Discharge Elimination System (NPDES) permit for the discharge of any pollutant into waters of the United States. The federal Environmental Protection Agency has delegated administration of the NPDES program to the SWRCB and nine RWQCBs. The SWRCB and RWQCB also regulate other waste discharges to land within California through the issuance of waste discharge requirements under authority of the Porter-Cologne Water Quality Act.

Affected Environment

The Project area is not located in any defined basin or subbasin according to the Department of Water Resources (DWR). The Project site is bounded by the Coastal Plain of Orange County (8-001) basin on the west, and the Elsinore-Bedford Coldwater subbasin (8-004.02) to the east (DWR, 2020). Much of the water within the Project area is derived from surface water or channeled from other areas.

Based on a review of GeoTracker, the closest site near the Project area is the USA Station #824 (26731 Portola) in Lake Forest, which is approximately 2.5 miles southwest of the Project site. Boring logs from the site indicated depth to groundwater during drilling ranged from 34 feet below ground surface (ft bgs). Monitoring well information indicated depth to groundwater in the wells ranged from 9-19 ft bgs, and flow direction was to the southeast (Montrose Environmental, 2019). The EDR report with the GeoCheck® Physical Setting Source Summary did not identify any state well within a 1-mile radius of the Project site.

The Project site is located within the Santa Ana River - Lower Santa Ana River – Santiago Watershed (801.12). The Santa Ana River is the largest watershed drainage south of the Sierra and is located largely in a highly urbanized and regulated setting. The watershed is approximately 100- miles-long and has more than 50 tributary rivers and creeks. The Santa Ana watershed spans parts of San Bernardino, Riverside, and Orange counties, draining approximately 2,840 square miles (Water Education Foundation, 2020).

The river is divided geographically into upper and lower watersheds that are delineated by the 60-year old Prado Dam, which is a flood-controlled facility located where the river cuts through the Santa Ana Mountains section of the Coast Ranges (Water Education Foundation, 2020).

The Santa Ana watershed drains the Santa Ana River that begins in San Bernardino County and flows west into the Pacific Ocean. The largest tributary rivers include Lytle, Temescal, and Santiago Creeks. Like multiple rivers in this area, the Santa Ana River’s stream bed is lined with concrete. Much of the area relies on the Santa Ana River and its tributaries due to the climate in Southern California (Water Education Foundation, 2020).

Response to Question a): Less than Significant with Mitigation Incorporated. A Construction Storm Water General Permit is required, consistent with Construction General Permit Order No. 2009-0009-DWQ, issued by the SWRCB, to address storm water runoff, as well as a Section 401 Water Quality Certification permit. The permits would address grading, clearing, grubbing, and disturbances to the ground, such as stockpiling, or excavation. This Project would also require the preparation and implementation of a SWPPP with the intent of keeping all products of erosion from moving off site into receiving waters. The SWPPP includes BMPs to prevent construction pollutants from entering storm water runoff. By preparing and following the stormwater BMPs provided in the SWPPP, the Project impacts to water quality would be less than significant per implementation of measures **WQ-1** and **WQ-4**.

Response to Question b): No Impact. The proposed Project does not propose activities requiring permanent increases in groundwater use. No new buildings that will increase water usage are proposed. The proposed project would involve the replacement of an existing bridge. The Project does not have the potential to impede sustainable groundwater management of the basin.

Response to Question c): No impact. The proposed Project would involve temporary construction activities within Santiago Creek, and they would be limited to temporary ground disturbance associated with construction on the new bridge structure, and any diversion or dewatering activities necessary to avoid work occurring within flowing waters. Due to these temporary construction activities, the Project is anticipated to have temporary impacts to the Santiago Creek channel. However, these temporary impacts would cease after construction, and conditions would be restored to pre-Project conditions. There are no permanent impacts anticipated. The Project does not require any alteration of Santiago Creek and would not alter the existing drainage pattern of the area.

Response to Question ci): Less than Significant with Mitigation Incorporated. The proposed Project will be built in the same place as the existing structure, and no substantial erosion is expected from development. Additionally, **BIO-3** would be implemented during Project development to reduce erosion during construction.

Response to Question cii): Less than Significant with Mitigation Incorporated. The proposed Project will not result in a discernable increase in the volume of storm water runoff into the waterways within the Project area. There would be an increase of impervious surface area, due to the proposed bridge being longer and wider than the existing bridge. However, the bridge and roadway replacement would be on the same alignment and would have a minimal increase in impervious area on the Project site relative to the watershed area. Best Management Practices (BMP) **WQ-1** will be implemented during construction.

A Floodplain Evaluation Report (October 2021) was prepared that concluded that the Project would not negatively affect the floodplain since the majority of improvements are within the existing impervious area and the widened roadway would not significantly increase the fill in the floodplain.

Response to Question ciii): Less than Significant with Mitigation Incorporated. The proposed Project will not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems. Additionally, the inclusion of a SWPPP or WPCP in **BIO-3** would prevent erosion and protect water quality during construction.

Response to Question d): Less than Significant Impact. The proposed Project is located within a community that experiences seasonal floods and in a Special Flood Hazard Area Subject to Inundation by

the 1% Annual Chance Flood (FIRM, Orange County, Panel 309 of 539) (Appendix F). Due to construction constraints, the proposed bridge will only be able to pass approximately the 5-year storm event. In the event of inundation, pollutants resulting from standard roadway traffic may be released into the local waterways.

The Project is located approximately 15 miles northeast of the Pacific Ocean and is not subject to tsunamis. Furthermore, the Project site is not subject to seiche or mudflow.

Response to Question e): No Impact. As discussed in Response to Impact Question b), implementation of the proposed Project would not interfere with groundwater recharge in the groundwater basin and would not affect the local groundwater table. The proposed Project would involve the replacement of a bridge. Thus, there would be no loss of land available for groundwater recharge as the Project would not significantly decrease pervious surfaces. The construction of the proposed Project would require minimal amounts of water for concrete mixing and dust abatement. Operation of the proposed Project would not require the use of potable water, with the exception of occasional maintenance. The Project would not conflict or obstruct a water quality control plan or sustainable groundwater management plan. No impacts are anticipated.

Avoidance, Minimization, and/or Mitigation Measures

See section 4.8 Biological Resources for biological measures.

To conform to water quality requirements, the Project would implement the following BMPs.

WQ-1: BMPs will be incorporated into Project design and Project construction to minimize impacts on the environment:

- The area of construction and disturbance shall be limited to as small an area as feasible to reduce erosion and sedimentation.
- Measures shall be implemented during land-disturbing activities to reduce erosion and sedimentation. These measures may include mulches, soil binders and erosion control blankets, silt fencing, fiber rolls, temporary berms, sediment desilting basins, sediment traps, and check dams.
- Existing vegetation shall be protected where feasible to reduce erosion and sedimentation. Vegetation shall be preserved by installing temporary fencing, or other protection devices, around areas to be protected.
- Exposed soils shall be covered by loose bulk materials or other materials to reduce erosion and runoff during rainfall events.
- All construction roadway areas shall be properly protected to prevent excess erosion, sedimentation, and water pollution.
- All concrete curing activities shall be conducted to minimize spray drift and prevent curing compounds from entering the waterway directly or indirectly.
- All construction materials, vehicles, stockpiles, and staging areas shall be situated outside of the creek channel. All stockpiles must be covered, as feasible.
- All erosion control measures and stormwater control measures shall be properly maintained until the site has returned to a pre-construction state.
- All construction materials shall be hauled off-site after completion of construction.

WQ-2: Any requirements for additional avoidance, minimization, and/or mitigation measures will be contained in the permits obtained from required regulatory agencies.

WQ-3: The proposed Project will require a National Pollution Discharge Elimination System (NPDES) General Construction Permit for Discharges of stormwater associated with construction activities. A SWPPP or Water Pollution Control Plan (WPCP) will also be developed and implemented as part of the Construction General Permit.

WQ-4: The construction contractor shall adhere to the SWRCB Order No. 2012-0006-DWQ NPDES Permit pursuant to Section 402 of the CWA. This permit authorizes stormwater and non-stormwater discharges from construction activities. As part of this Permit requirement, an SWPPP or WPCP will be prepared prior to construction consistent with the requirements of the RWQCB. This SWPPP shall incorporate all applicable BMPs to ensure that adequate measures are taken during construction to minimize impacts to water quality.

4.15 Land Use and Planning <i>Would the Project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Affected Environment

The Project area is located in a rural setting surrounded by residential homes on large parcels of undeveloped land. The Project site is located in the eastern central part of Orange County. The proposed bridge replacement staging areas are located to the northwest and southwest of the bridge with corresponding Assessor Parcel Numbers (APN) 105-221-09 and 105-221-26, respectively.

Response to Question a): Less Than Significant Impact with Mitigation Incorporated. The physical division of an established community typically refers to the construction of a linear feature (such as a major highway or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community or between a community and outlying area. The Modjeska Bridge No. 55C-0172 connects Modjeska Canyon Road and Markuson Road and is used to connect rural residential area to more urbanized areas to the west. During the first stage of construction, the road will be closed to traffic for temporarily two days while a temporary bridge is constructed. Modjeska Grade Road will be utilized for traffic during this road closure. During the second stage of construction, one lane of alternating traffic will be shifted to the new bridge, with the temporary bridge removed and the remaining half of the new bridge constructed. The Project will not physically divide an established community permanently. A two-day road closure will cause temporary impacts; Modjeska Grade Road will be utilized for traffic during this road closure. The Project would not result in the construction of any new barriers that could potentially divide an established community. With the implementation of a Traffic Management Plan (**WF-1**) and providing notification of changes to residents prior to construction (**WF-6**), impacts will be minimized.

Response to Question b): Less than Significant Impact. The Project is a bridge replacement and will not include high cut and fill banks or have permanent impacts that would destroy the beauty and integrity of the natural terrain and vegetation. Tree removal will follow tree preservation guidelines by replanting mature trees that have been removed (**BIO-9**). The Project will also follow geologic hazards guidelines by implementing Caltrans’ seismic design criteria and construction standards. The proposed Project does not involve change in land use designation nor require an amendment to the Silverado-Modjeska Specific Plan. The proposed Project would not cause a significant environmental impact due to conflicts with applicable land use plans, policies, and regulations and impacts would result in no impact. The Project will not change land use in the area, therefore abiding by floodplain guidelines in the Silverado-Modjeska

Specific Plan. The Project is consistent with the Silverado-Modjeska Specific Plan and would not conflict with development guidelines.

Avoidance, Minimization, and/or Mitigation Measures

See section 4.24 Wildfire for wildfire measures, specifically **WF-1** and **WF-6** that pertain to a Traffic Management Plan and community notifications.

4.16 Mineral Resources <i>Would the Project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

Orange County has significant amounts of mineral resources, which has been utilized to meet development needs in the form of construction aggregate. The mineral land classification in the Modjeska Bridge Project area is Portland Cement Concrete Aggregate.

Response to Question a): No Impact. The Orange County General Plan indicates that the Project area is not located in an area with mineral resources (Orange County Public Works, General Plan, Chapter VI. Resources Element, 2015). The nearest mineral resource area is in Trabuco Canyon, approximately 4 miles southeast from the Project area. Due to the distance between the closest mineral resource no impacts are anticipated.

Response to Question b): No Impact. The Project is not located in an area with mineral resources. The proposed project would involve the replacement of an existing bridge and would not result in the loss of availability of a locally important mineral resource site or have any other impacts to mineral resources. Therefore, the Project would not result in impacts to mineral resources.

4.17 Noise <i>Would the Project result in:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a Project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Regulatory Setting

In accordance with State guidelines, noise is defined as unwanted sound with different thresholds depending on specific areas. Sound levels usually are measured and expressed in decibels (dB), with 0 dB being the threshold of hearing. Decibel levels range from 0 to 140: 50 dB for light traffic is considered a low decibel level, whereas 120 dB for a jet takeoff at 200 feet (ft.) is considered a high decibel level.

State Standards

According to Caltrans Traffic Noise Analysis Protocol for New Highway Construction, Reconstruction, and Retrofit Barrier Projects (Caltrans 2020a), construction noise is regulated by Caltrans Standard Specifications 14-8.02, Noise control, which states the following:

- Do not exceed 86 A-weighted decibels (dBA) at 50 feet from the job site activities from 9:00 p.m. to 6:00 a.m.
- Equip an internal combustion engine with the manufacturer-recommended muffler. Do not operate an internal combustion engine on the job site without the appropriate muffler.

Local Standards

Orange County General Plan

The County’s General Plan Noise Element contains noise guidelines for determining land use. As detailed in the Noise Element’s Major Noise Policy 6 (Noise Sensitive Land Uses), all new residential units are

required to “have an interior noise level in living areas that is not greater than 45 decibels CNEL [Community Noise Equivalent Level] with it being understood that standard construction practices reduce the noise level by 12 decibels CNEL with the windows open and 20 decibels CNEL with the windows closed. Higher attenuation than listed above may be claimed if adequate field monitoring or acoustical studies are provided to and approved by the County (Policy 6.3 in Orange County General Plan).” In addition, Policy 6.5 states, “All outdoor living areas associated with new residential uses shall be attenuated to less than 65 decibels CNEL.”

Orange County Noise Ordinance

Under the Orange County Code of Ordinances, Division 6 – Noise Control, Sec. 4-6-7. Special provisions; the following activities shall be exempt from the provisions of this article: (e) Noise sources associated with construction, repair, remodeling, or grading of any real property, provided said activities do not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or at any time on Sunday or a Federal holiday.

Affected Environment

The Project area is located in a rural setting, surrounded by the Cleveland National Forest with residential homes on large parcels of land.

Response to Question a): Less than Significant with Mitigation Incorporated. The broad, noise-related goal of the Orange County is to: Protect the health, safety, and general welfare of County residents by reducing noise levels and establishing compatible land uses in noise-impacted areas (Orange County General Plan, Chapter VIII. Noise Element 2012). The Project will generate temporary increases in noise due to construction activities, but a permanent increase in ambient noise will not occur. Table 14 below lists typical noise levels associated with construction equipment.

Table 14: Typical Construction Equipment Noise Levels

Type of Equipment	Typical Noise Level (dBA) 50 feet from Source
Dozer	85
Excavator	88
Concrete Mixer	85
Compactor	82
Loader	85
Backhoe	80
Grader	85
Crane	83
Generator	81
Truck	88

Short-Term Construction Noise

During construction, noise from equipment would cause short-term localized increases in ambient noise levels. Residential homes are generally within 150 feet of construction activities with the highest possible noise level from construction being 88 dBA. The actual noise levels at any particular location would

depend on a variety of factors, including the type of construction equipment or activity involved, distance to the source of the noise, obstacles to noise that exist between the receptor and the source, time of day, and similar factors. Construction of the proposed Project would result in a temporary, periodic increase in ambient noise levels. However, this increase would be temporary, intermittent, and limited to daytime hours.

Long-Term Operational Noise

The completed Project would have a similar noise environment to existing conditions, as there would be no additional travel lanes added. Therefore, operation of the completed facility would not be in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, and impacts would be less than significant with mitigation. The Project will comply with the County of Orange Noise Control Ordinance and will not conduct activities that would exceed exterior noise standards during hours defined in Sec. 4-6-7. Special provisions. (e). Measure **NOI-1** will be implemented to reduce impacts to a less than significant level.

Response to Question b): Less than Significant Impact. Temporary groundborne vibration and noise would be associated with the dismantling of the existing bridge and replacement with the new bridge. However, the nearest residential structure to the bridge is approximately 90 feet southeast and the next nearest residential structure is approximately 160 feet away from the bridge. Caltrans has collected ground-borne vibration information related to construction/heavy equipment activities. Information from Caltrans indicates that transient vibrations (such as from demolition activity) with a peak particle velocity of approximately 0.035 inches per second may be characterized as barely perceptible, and vibration levels of 0.24 inches per second may be characterized as distinctly perceptible (Caltrans 2020b). The heavier pieces of construction equipment, such as large bulldozers or hoe rams, would have peak particle velocities of up to approximately 0.089 inches per second at a distance of 25 feet, and a clam shovel drop would have peak particle velocities of up to approximately 0.202 inches per second at a distance of 25 feet (DOT 2018). Ground-borne vibration is typically attenuated over short distances. The Project does not anticipate the generation of excessive groundborne vibration or groundborne noise levels to residents to be excessive.

Response to Question c): No Impact. The Project is not located within the vicinity of an airstrip, an airport land use plan, or an airport. The closest public airport to the project site is Corona Municipal Airport located in Riverside County approximately 12.0 miles northeast of the Project site. Therefore, the Project would result in no impact to creating excessive noise for people residing or working within an airport land use plan.

Avoidance, Minimization, and/or Mitigation Measures

NOI-1: To minimize construction-related noise in the area, the following Best Management Practices (BMP) shall be followed:

- Construction activities will not occur between the hours of 8:00pm and 7:00am on weekdays, including Saturdays, or any time on Sunday or a Federal holiday.
- Ensure all internal combustion engine equipment is equipped with the manufacturer recommended muffler.

4.18 Population and Housing

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Response to Question a): No Impact. The Project would have no direct impact on population growth since it does not propose new homes or businesses. Construction workers would likely be hired from the local area and commute to the job site on a daily basis. Construction workers would also be present for a temporary period of time and are not expected to contribute to population growth in the project area. The current bridge is on an existing road surrounded by existing infrastructure. Furthermore, the Project is a bridge replacement Project that would serve existing and planned population growth and reduce traffic. No impacts are anticipated.

Response to Question b): No Impact. The proposed Project would replace an existing bridge. Temporary easements and partial parcel acquisition will be necessary but are anticipated to be minimal and would not displace any people or housing. No displacement of people on the Project site or surrounding area would occur. No Impacts are anticipated.

4.19 Public Services

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a-i) Fire protection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a-ii) Police protection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a-iii) Schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a-iv) Parks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a-v) Other public facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Response to Question a-i): Less than Significant with Mitigation Incorporated. The Project does not propose a new housing or commercial development requiring additional fire services. The proposed Project will replace the existing facilities in the same location. During the first stage of construction, a temporary bridge approximately 80 feet long will be placed within the footprint of the new bridge, reducing environmental and right of way impacts to the same as needed for only the new bridge. This will require the road to be closed to traffic for approximately 2 days while the existing bridge is removed and the temporary bridge is erected. Modjeska Grade Road will be utilized for traffic during this short road closure. For the second construction stage, one lane of alternating traffic is shifted to the new bridge, the temporary bridge is removed, and the remaining half of the new bridge is constructed. The proposed Project would have a less than significant impact on emergency fire access during Project construction with the incorporation of an Emergency Plan and Traffic Management Plan; local fire response personnel will be informed of any transportation constraints of the bridge due to construction. See mitigation measures **WF-1** through **WF-6** under Section 4.24 Wildfire.

Response to Question a-ii): Less than Significant with Mitigation Incorporated. The Project does not propose a new housing or commercial development requiring additional police services. During the first stage of construction, a temporary bridge will be erected which will cause a two day road closure. Modjeska Grade Road will be utilized for traffic during this short road closure. For the second construction stage, one lane of alternating traffic is shifted to the new bridge, the temporary bridge is removed, and the remaining half of the new bridge is constructed. The proposed Project would have a less than significant impact on emergency fire access during Project construction with the incorporation of an Emergency Plan and Traffic Management Plan; local fire response personnel will be informed of any transportation constraints of the bridge due to construction. See mitigation measures **WF-1** through **WF-6** under Section 4.24 Wildfire.

Response to Question a-iii): No Impact. The Project does not include a residential component; therefore, no direct increase in population would occur requiring additional school facilities. It will allow for safer

transport to local schools with the closest public school, Portola Hills Elementary School (19422 Saddleback Ranch Rd), approximately 2 miles to the south.

Response to Question a-iv): No Impact. The Project is located in the community of Modjeska, Orange County, California within unincorporated Orange County. Modjeska is bounded by the Cleveland National Forest to the east and the Limestone Canyon Regional Park to the west. The Project area is surrounded by rural residential uses that utilize these parks for recreation. The Project would not introduce residents that would increase the use of these parks. No impacts are anticipated.

Response to Question a-v): No Impact. The proposed Project involves replacement of an existing bridge. The Project would not generate new permanent residents nor increase demand in the surrounding area. The Project will not have an impact on other public facilities.

Avoidance, Minimization, and/or Mitigation Measures

See Wildfire mitigation measures **WF-1** through **WF-6** in Section 4.24 Wildfire.

4.20 Recreation

Would the Project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Affected Environment

The Project area is located on the western slope of the Santa Ana Mountains and adjacent to the Cleveland National Forest. Residents and visitors enjoy the forest and trails and the recreational opportunities they provide.

Response to Question a): No Impact. As addressed in Impact Question a-iv) in Section 4.19, The Project is located in the community of Modjeska, Orange County, California, within unincorporated Orange County. Modjeska is bounded by the Cleveland National Forest to the east and the Limestone Canyon Regional Park to the west. The Project area is surrounded by rural residential uses that utilize these parks for recreation. The Project would not residents that would increase the use of these existing parks or other recreational facilities such that substantial physical deterioration would occur. No impacts are anticipated.

Response to Question b): No Impact. The Project is a bridge replacement and does not require the construction or expansion of recreational facilities which would have an adverse effect on the environment. The Project would not induce substantial population growth indirectly through the expansion of infrastructure. Therefore, there would be no impacts to recreational facilities. Therefore, there would be no impacts to recreational facilities.

4.21 Transportation <i>Would the Project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the Project conflict or be inconsistent with CEQA section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Response to Impact Question a): No Impact. The Project area is located within suburban residential land use area in the unincorporated community of Modjeska Canyon. No Traffic impact analysis report was done for this project because the proposed Project is not anticipated to increase traffic on Modjeska Canyon Road or nearby roadways. The Project will not conflict or hinder the circulation system in any way nor conflict with Orange County’s General Plan Transportation Element or Circulation Plan.

Vehicle miles traveled (VMT) replaces level of service (LOS) as the metric for impact determination. The replacement bridge will not increase VMT on Modjeska Canyon Road.

Response to Impact Question b): Less than Significant Impact. Section 15064.3(b) of the CEQA Guidelines states that Projects considered transportation Projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less-than-significant transportation impact. The Office of Planning and Research Technical Advisory on Evaluating Transportation Impacts in CEQA states, "Transit and active transportation Projects generally reduce VMT and therefore are presumed to cause a less-than-significant impact on transportation" (OPR 2018, p. 23). Transportation Projects include rehabilitation, maintenance, replacement, safety, and repair Projects designed to improve the condition of existing transportation assets (e.g., highways, roadways, bridges, culverts) and would not add additional motor vehicle capacity. This is also consistent with the County of Orange Guidelines for Evaluating Vehicle Miles Traveled Under CEQA adopted by the Board of Supervisors on November 17, 2020 (Orange County 2020). Therefore, implementation of the proposed Project would not conflict or be inconsistent with the provisions of CEQA Guidelines Section 15064.3 because it would replace an existing bridge and is designed to improve the

condition of an existing transportation asset (bridge) and would not add additional motor vehicle capacity. Impacts would be less than significant and would not require mitigation.

Response to Impact Question c): No Impact. The proposed Project is not expected to substantially increase hazards due to its design. The proposed bridge will be constructed in the same place as the existing facilities and would meet current safety and geometric standards. The bridge is situated on a curve; however, the proposed bridge deck cannot be curved. Instead, the 4- and 6-foot shoulders will vary slightly to accommodate the curve, match the approaches, and meet the 25 mph design speed.

Response to Impact Question d): Less than Significant with Mitigation Incorporated. The proposed Project will replace the existing facilities in the same location. Construction will occur in stages with a brief road closure of approximately 2 days; Modjeska Grade Road will be utilized as a detour (approximately 4 miles in length) for traffic during this short road closure. Part of the first stage of construction consists of the installation of a temporary bridge that will be placed adjacent to the existing bridge and within the footprint of the new wider bridge. The temporary bridge will contain both directions of travel on one lane. A temporary traffic signal system will be used for traffic control. With the implementation of measure **WF-5** (see Section 4.24), the proposed Project would have a less than significant impact on emergency fire access during Project construction; local fire response personnel will be informed of any transportation constraints of the bridge due to construction.

Avoidance, Minimization, and/or Mitigation Measures

See Section 4.24 Wildfire mitigation measure **WF-5** that includes the implementation of an Emergency Plan.

<p>4.22 Tribal Cultural Resources</p> <p><i>Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</i></p>	<p>Potentially Significant Impact</p>	<p>Less than Significant With Mitigation Incorporated</p>	<p>Less than Significant Impact</p>	<p>No Impact</p>
<p>a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).</p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input checked="" type="checkbox"/></p>	<p><input type="checkbox"/></p>
<p>b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p>	<p><input type="checkbox"/></p>	<p><input checked="" type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>

Regulatory Setting

Effective July 1, 2015, CEQA was revised to include early consultation with California Native American tribes and consideration of tribal cultural resources (TCRs). These changes were enacted through Assembly Bill 52 (AB 52). By including TCRs early in the CEQA process, AB 52 intends to ensure that local and Tribal governments, public agencies, and Project proponents would have information available, early in the Project planning process, to identify and address potential adverse impacts to TCRs. CEQA now establishes that a “Project with an effect that may cause a substantial adverse change in the significance of a TCR is a Project that may have a significant effect on the environment” (PRC § 21084.2).

To help determine whether a Project may have such an adverse effect, the PRC requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed Project. The consultation must take place prior

to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a Project (PRC § 21080.3.1). Consultation must consist of the lead agency providing formal notification, in writing, to the tribes that have requested notification or proposed Projects within their traditionally and culturally affiliated area. AB 52 stipulates that the NAHC shall assist the lead agency in identifying the California Native American tribes that are traditionally and culturally affiliated within the Project area. If the tribe wishes to engage in consultation on the Project, the tribe must respond to the lead agency within 30 days of receipt of the formal notification. Once the lead agency receives the tribe's request to consult, the lead agency must then begin the consultation process within 30 days. If a lead agency determines that a Project may cause a substantial adverse change to TCRs, the lead agency must consider measures to mitigate that impact. Consultation concludes when either: 1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a TCR, or 2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC § 21080.3.2). Under existing law, environmental documents must not include information about the locations of an archaeological site or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records act. TCRs are also exempt from disclosure. The term "tribal cultural resource" refers to either of the following:

Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

- Included or determined to be eligible for inclusion in the California Register of Historical Resources
- Included in a local register of historical resources as defined in subdivision (k) of California Public Resources Code (PRC) Section 5020.1
- A resource determined by a California lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of the PRC Section 5024.1.

Affected Environment

The Area of Potential Effect (APE) was established as the area of direct and indirect effects which encompasses the 2.0-acre APE. The APE includes potential staging areas, construction areas, vegetation/tree removal, temporary construction easements, and utility relocation. The approximate limits of the APE include a 230-foot-long segment of Modjeska Canyon Road west of the existing limits of the Modjeska Canyon Road Bridge, a 200-foot-long segment of Markuson Road east of the existing Modjeska Canyon Road Bridge, a 190-foot-long segment of Modjeska Canyon Road south of the existing Modjeska Canyon Road Bridge, a 220-foot-long segment of Shadowland Circle, and approximately 300 feet of Santiago Creek.

The vertical APE extends approximately 3 feet deep for road reconstruction, and approximately 10 feet deep for excavation of the two bridge abutments. The proposed staging areas should have less than 6 inches of ground disturbance from the movement of heavy machinery.

Native American Consultation Per Assembly Bill 52, the following California Native American tribes: Juaneño Band of Mission Indians, San Gabriel Band of Mission Indians, Soboba Band of Luiseño Indians, and Gabrieleño Band of Mission Indians - Kizh Nation were sent an AB 52 Initial Consultation Letter on July 8, 2021. No responses were received from any of the Native American Tribes.

Response to Question a): Less than Significant Impact. An Area of Potential Effect (APE) was established which encompasses 2.0 acres. The approximate limits include a 230-foot-long segment of Modjeska

Canyon Road west of the existing limits of the bridge, a 200-foot-long segment of Markuson Road east of the existing bridge, a 190-foot-long segment of Modjeska Canyon Road south of the existing bridge, a 220-foot-long segment of Shadowland Circle, and approximately 300 feet of Santiago Creek. The vertical APE extends approximately 3 feet deep for road reconstruction and approximately 10 feet deep for excavation of the bridge abutments. A record search revealed no resources within the APE and, therefore, a Finding of No Historic Properties Affected has been determined.

Response to Question b): Less than Significant with Mitigation Incorporated. Background research consisted of a record search, literature and map review, and consultation with the Native American Heritage Commission (NAHC) and Native American groups. A records search of previously recorded resources within the APE and a one-mile radius was obtained from the South Central Coastal Information Center (SCCIC), which disclosed 15 cultural resources within the one-mile radius, but no resources within the APE. The documented resources consist of nine lithic scatters, two prehistoric isolates, and four historic-era sites. If buried cultural materials are encountered during construction, work will stop in that area until a qualified archaeologist can evaluate the nature and significance of the find in compliance with measures **CUL-2** and **CUL-3**.

Avoidance, Minimization, and/or Mitigation Measures

Mitigation Measures **CUL-2** through **CUL-3** within Section 4.9 will be implemented for any impacts relating to Tribal Cultural Resources.

4.23 Utilities and Service Systems <i>Would the Project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's Projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Response to Question a): Less than Significant Impact. A water line would be temporarily relocated, but still fully functional during construction and then relocated on the new bridge, which would not cause significant environmental effects. The water line relocation would take no more than two days with water transmission restored within that time. A stormwater conveyance facility begins along Modjeska Grade Road, continues through the Project area, and ends as a discharge point above the OHWM of Santiago Creek. The Project will not be impacting this stormwater conveyance facility.

The Project is a bridge replacement and would not require or necessitate any new or expanded water, wastewater treatment, storm water drainage, natural gas, or telecommunications facilities. Therefore, the Project would not necessitate relocation of the aforementioned utilities.

Response to Question b): Less than Significant Impact. Project construction would temporarily require the use of water resources for dust control. However, water usage would be negligible respective to long term water supply. Water would not be required for Project operation. Therefore, the Project would result in a less than significant impact on having sufficient water supplies available to serve the Project and reasonably foreseeable future.

Response to Question c): No Impact. The Project would not include the construction of any wastewater-generating uses nor would it generate a new or expanded use that would need wastewater treatment. Therefore, no impacts are anticipated.

Response to Question d): Less than Significant with Mitigation. Solid waste associated with the removal of the existing bridge that includes broken up concrete and steel girders will occur with Best Management Practices incorporated by the construction contractor, which would dispose or recycle waste at an appropriate waste disposal or recycling facility.

There are three active landfills operated by the County's Waste & Recycling. The landfills are Olinda Alpha, Frank R. Bowerman, and Prima Deshecha. Each have different requirements, for example, the Frank R. Bowerman Landfill is one of the largest in the state and is permitted for 11,500 tons per day (TPD). Solid waste from the demolition of the existing bridge would be taken to one of the landfills or approved facilities identified by the County's Construction & Demolition (C&D) Program. The Project would result in a less than significant impact to solid waste generation with **UTL-1** incorporated.

Response to Question e): Less than Significant Impact. Project construction would require minimal, short-term solid waste disposal, which would be conducted in compliance with federal, state, and local statutes and regulations related to solid waste. Waste would be generated during construction activities, which include the removal of the existing bridge. Therefore, the Project would result in less than significant impact related to solid waste.

Avoidance, Minimization, and/or Mitigation Measures

UTL-1: OC Public Works shall complete and submit a construction and demolition program application to County of Orange Waste & Recycling. The application will identify and estimate the material to be recycled and demolished during construction. Compliance with the plan will be required within construction contracts. OC Public Works shall prepare a tonnage report for County of Orange Waste & Recycling.

<p>4.24 Wildfire</p> <p><i>If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:</i></p>	<p>Potentially Significant Impact</p>	<p>Less than Significant With Mitigation Incorporated</p>	<p>Less than Significant Impact</p>	<p>No Impact</p>
<p>a) Substantially impair an adopted emergency response plan or emergency evacuation plan?</p>	<p><input type="checkbox"/></p>	<p><input checked="" type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>
<p>b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?</p>	<p><input type="checkbox"/></p>	<p><input checked="" type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>
<p>c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?</p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input checked="" type="checkbox"/></p>
<p>d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?</p>	<p><input type="checkbox"/></p>	<p><input type="checkbox"/></p>	<p><input checked="" type="checkbox"/></p>	<p><input type="checkbox"/></p>

Affected Environment

The proposed Project is located in a State Responsibility Area in a “very high fire hazard severity” zone (FHSZ 2021).

Response to Question a): Less than Significant with Mitigation Incorporated. The proposed Project will replace the existing facilities in the same location. During construction, the road will be closed for approximately two days while the temporary bridge is erected. Modjeska Grade Road will be utilized as a detour (approximately 4 miles in length) for traffic during this short road closure. The proposed Project would have a less than significant impact with mitigation measures stated under measure **WF-1** on emergency fire access during Project construction.

Similarly, the proposed Project would regulate transportation over the bridge replacement during phased construction. Because the Project is open to traffic during construction, the Project would have a less than

significant impact with mitigation stated under Public Services to inform the community what to do in the event of an emergency evacuation during active construction.

Response to Question b): Less than Significant with Mitigation Incorporated. The Project will remove the existing bridge and replace it with a new one in the same location. The Project is not anticipated to exacerbate existing wildfire conditions. However, the area is located in a “very high fire hazard severity” zone and would implement mitigation measures **WF-3** and **WF-4** to prevent risk of wildfire and uncontrolled spread of a wildfire. Project operation would not result in increased wildfire hazard risk beyond existing conditions and would enhance overall safety conditions in the project area by enhancing the safety and durability of the bridge structure. Therefore, the Project would result in less than significant impact with mitigation measures incorporated for wildfire pollutant exposure.

Response to Question c): Less Than Significant with Mitigation Incorporated. The Project involves replacement of the existing Modjeska Canyon Bridge. A temporary staging area near the bridge will be used for equipment storage and vehicle parking. The construction phase has the potential to exacerbate fire risk. With the implementation of **WF-1** through **WF-6**, temporary impacts to the environment would be less than significant with mitigation measures incorporated.

Response to Question d): Less than Significant Impact. The Project would remove the existing bridge and replace it with a new bridge with new abutments that require impacts to riparian habitat that would have a localized impact on flow characteristics. However, the extent of those localized flow changes on Santiago Creek, an intermittent stream, is less than significant and will not expose people or structures to downslope or downstream flooding or landslides.

Avoidance, Minimization, and/or Mitigation Measures

WF-1: The contractor shall prepare a Traffic Management Plan that includes a Project schedule with specific information on the staged construction and when only one lane will be available, vehicle restrictions during construction including if/when limitation to fire equipment access would occur, location of signage, and a map of work zone limits.

WF-2: The contractor shall prepare a Construction Fire Prevention Plan approved by the Orange County Fire Authority Fire Chief. The Construction Fire Prevention Plan shall implement fire safety measures during construction activities in compliance with the National Fire Protection Association Standard 51B and California Public Resources Code Section 4442.

- The Construction Fire Prevention Plan shall be approved by the Orange County Fire Authority Fire Chief 20 days prior to the start of construction activities.
- The Construction Fire Prevention Plan shall include a details schedule of construction activities, temporary light signal hours of operation, and after work hours emergency contact information.
- The Construction Fire Prevention Plan shall include emergency operational procedures for the following.
 - Wildland fires
 - Structural fires
 - Red flag days
 - Emergency medical services emergencies
 - Flood emergencies

WF-3: Hot work shall cease during Red Flag Warning periods declared by the National Weather Service.

WF-4: In the event of a fire on the Project site, all construction activities will immediately stop, the construction crew should use the onsite fire extinguishers to extinguish the fire and dial 911 to inform fire services that a fire has occurred.

WF-5: The contractor shall prepare an Emergency Plan with a Project schedule, including start and end dates for construction phases. The Emergency Plan shall include emergency operational procedures for:

- Flood emergencies
- Wildland Fires
- EMS emergencies
- Red Flag Days
- Loss of power

The Emergency Plan shall be provided to the Orange County Fire Authority, Orange County Sheriff, and Orange County Public Works.

WF-6: Two weeks prior to initiation of construction activities, the contractor shall post on the community bulletin board adjacent to the Modjeska Community Center located at 28890 Modjeska Canyon Road, and mail to the homes and PO Boxes in Modjeska Canyon the following:

- Information on Orange County Fire Authority's Ready, Set, Go! safety program
- An emergency evacuation route map
- The direct phone number of Orange County Fire Station number 16 and 42

<p>4.25 Mandatory Findings of Significance</p> <p><i>Would the Project:</i></p>	<p>Potentially Significant Impact</p>	<p>Less than Significant With Mitigation Incorporated</p>	<p>Less than Significant Impact</p>	<p>No Impact</p>
<p>a) Does the Project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>b) Does the Project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a Project are considerable when viewed in connection with the effects of past Projects, the effects of other current Projects, and the effects of probable future Projects)?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>c) Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Response to Question a): Less than Significant with Mitigation Incorporated. Implementation of the Project would have the potential to impact the quality of the existing environment. Potential impacts have been identified related to Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Public Services, Transportation, Tribal Cultural Resources, and Wildfire. Mitigation measures and BMP have been defined within this document related to individual resource-specific impacts to reduce impacts to the greatest extent possible.

Therefore, the Project would not substantially degrade the quality of environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.

Response to Question b): Less than Significant with Mitigation Incorporated. The Project would have less than significant environmental impacts with mitigation incorporated. Past and current Projects, for example the Silverado Bridge Replacement Project, in the Project vicinity have been or will be cleared through the CEQA process and potentially significant impacts from those previous or future Projects would have been or will be mitigated. The Silverado Bridges are in a separate canyon and impacts from the Modjeska Canyon Bridge Project, especially biological impacts, are not cumulatively considerable when assessed with the impacts from the other respective Projects. Cumulative effects are not anticipated as this is a standalone Project and nearby Projects and their impacts would be localized and of limited extent.

The following table provides a summary of related Projects in the vicinity of the Project site, which is used in the cumulative impact analysis. Figure 6 provides a visual representation of the related Projects.

Table 15: Related Projects

Project	Location	Description
Orange County		
Silverado Canyon Road Bridge Replacement 55C-0177	Bridge approximately 4.5 miles northeast of the Project on Silverado Canyon Road.	Replacement bridge over Silverado Creek due to structural deficiency Anticipated construction year: 2023
Silverado Canyon Road Bridge 55C-0174	Bridge approximately 4 miles north of the Project on Silverado Canyon Road.	Replacement bridge over Silverado Canyon Creek due to structural deficiency. Anticipated construction year: 2023
Silverado Canyon Road Bridge 55C-0175	Bridge approximately 4 miles north of the Project on Silverado Canyon Road.	Replacement bridge over Ladd Creek due to structural deficiency Anticipated construction year: 2022

Source: OC Public Works, Development Services/Planning (2021).

The discussion below provides environmental impacts of the Project, highlighting specific factors that could potentially be cumulatively considerable, but are not anticipated to be due to the incorporated mitigation for this individual Project; it is presumed the other projects above will also incorporate a mitigation and monitoring plan thus avoiding cumulatively considerable impacts.

Biological Resources

Dominant vegetation communities within the BSA consists of urban, disturbed, annual grassland, stream channel, stormwater conveyance facility, coastal sage scrub, and riparian woodland. Based on biological surveys and database research and inquiries, 12 special status wildlife species were determined to have potential to occur within the BSA. Additionally, designated ARTO critical habitat does occur within the Project area. Santiago Creek runs east to west through the BSA, but is not identified as an Essential Connectivity Area by CDFW.

Of the 12 species within the BSA, ten species have a low to moderate potential to occur, those are the *Coastal range newt*; *Western Spadefoot*; *Coastal California gnatcatcher*; *Least Bell's vireo*; *coastal whiptail*; *Red-diamondback rattlesnake*; *Southern California legless lizard*; *Western pond turtle*. The *coast horned lizard*; *Coast patch-nosed snake*; *Orange-throated whiptail* and *Two-striped gartersnake* are considered to have a high potential to occur. As stated above, there is also critical habitat for the arroyo toad (ARTO).

Section 7 Consultation with USFWS will determine mitigation for special status avian species (coastal California gnatcatcher and least Bell's vireo). The Project is anticipated to have a "may affect, not likely to adversely affect" impact on these species and critical habitat. Implementation of measures **BIO-1** through **BIO-9** and species-specific measures **BIO-14** through **BIO-16** would reduce impacts to less than significant.

Cultural and Tribal Cultural Resources

There is always potential to impact cultural or tribal cultural resources when ground disturbance occurs. However, through field surveys, record searches, and database inquiries there were no resources identified that would be significantly impacted. Avoidance, minimization, and mitigation measures identify protocols should any cultural or tribal cultural resources be unearthed during construction.

Hydrology and Water Quality

The Project site is located within the Santa Ana River - Lower Santa Ana River – Santiago Watershed (801.12). The Santa Ana River Watershed is the largest watershed drainage south of the Sierra and is located largely in a highly urbanized and regulated setting. The watershed is approximately 100 miles long and has more than 50 tributary rivers and creeks. The Santa Ana River Watershed spans part of San Bernardino, Riverside, and Orange counties, draining approximately 2,840 square miles (Water Education Foundation, 2020).

The Santa Ana watershed drains the Santa Ana River that begins in San Bernardino County and flows west into the Pacific Ocean. The largest tributary rivers include Lytle, Temescal, and Santiago creeks. Like multiple rivers in this area the stream bed is lined with concrete. Much of the area relies on the Santa Ana River and its tributaries due to the climate in Southern California (Water Education Foundation, 2020).

Impacts to hydrology and water quality would be less than significant with mitigation incorporated. A Construction Storm Water General Permit is required, consistent with Construction General Permit Order No. 2009-009-DWQ, issued by the SWRCB, to address storm water runoff, as well as a Section 401 Water

Quality Certification permit. The permits would address grading, clearing, grubbing, and disturbances to the ground, such as stockpiling, or excavation. This Project would also require the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) with the intent of keeping all products of erosion from moving off site into receiving waters. The SWPPP includes BMPs to prevent construction pollutants from entering storm water runoff. By preparing and following the stormwater BMPs provided in the SWPPP, the Project impacts to water quality would be less than significant per implementation of measures **WQ-1** and **WQ-4**.

The proposed Project will be built in the same place as the existing structure, and no substantial erosion is expected from development nor would the Project create runoff water which would exceed the capacity of existing or planned stormwater drainage systems. Additionally, **BIO-3** would be implemented during Project development to reduce erosion during construction.

Wildfire

The proposed Project is located in a State Responsibility Area in a “very high fire hazard severity” zone (FHSZ 2021). In light of current and foreseeable fire risks and extreme wildfire behavior, projects near or within heavily vegetated areas should include specific avoidance, minimization, and mitigation measures relevant to the area. This Project has identified measures to assure impacts to emergency and evacuation plans are reduced to a less than significant level.

During the first stage of construction, the road will be closed to traffic for temporarily two days while a temporary bridge is constructed. Modjeska Grade Road will be utilized for traffic during this road closure. During the second stage of construction, one lane of alternating traffic will be shifted to the new bridge, with the temporary bridge removed and the remaining half of the new bridge constructed. The proposed Project would have a less than significant impact emergency and public services during Project construction with the incorporation of an Emergency Plan and Traffic Management Plan (**WF-1**); local fire response personnel will be informed of any transportation constraints of the bridge due to construction (**WF-6**).

WF-1 through **WF-6** would be implemented to reduce the risk of wildfire to the greatest extent possible and assure protocols are understood and in place should an emergency caused by wildfire occur.

Response to Question c): Less than Significant Impact. The Project would have no adverse effects, directly or indirectly, on humans. The analysis shows that the Project would not have environmental effects causing substantial adverse effects on human beings, directly or indirectly. Impacts associated with Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Public Services, Transportation, Tribal Cultural Resources, and Wildfire would all be reduced to a less than significant level with implementation of avoidance, minimization, and/or mitigation measures.

Chapter 5: Summary of Mitigation Measures and Project Design Features

**MITIGATION MONITORING AND REPORTING PROGRAM FOR THE
MODJESKA CANYON BRIDGE REPLACEMENT PROJECT**

Mitigation Measure	Reporting Milestone	Reporting / Responsible Party	VERIFICATION OF COMPLIANCE	
			Initials	Date
<p>AIR QUALITY</p> <p>Implementation of Caltrans' Construction Site Best Management Practices</p>	Prior to and During Construction	Construction Contractor		
<p>BIOLOGICAL RESOURCES</p> <p>BIO-1: Prior to the start of construction activities, the Project limits in the vicinity of Santiago Creek and associated riparian areas shall be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into waters. Plans for the ESA fencing including maps of the project area and fencing limits shall be provided to the Carlsbad Fish & Wildlife Office (CFWO) at least 5 days prior to initiating project impacts. The fencing shall be inspected by the Contractor before the start of each workday and maintained by the Contractor until completion of the Project. The Project biologist will periodically inspect the ESA to ensure sensitive locations remain undisturbed.</p>	Prior to Construction	Construction Contractor		
<p>BIO-2: Every individual working on the Project must attend a biological awareness training session delivered by a qualified biologist. This training program shall include information regarding special-status species (including pertinent bird, amphibian, mammal, and reptile species along with photographs), sensitivity of the species to human activities, penalties for violations of Federal and State laws, and the importance of avoiding impacts to wildlife species individuals and associated habitat.</p> <p>The training shall include species identification characteristics, BMPs to be implemented, Project-specific avoidance measures that must be followed, and the steps necessary if the species is encountered at any time. Personnel would attend biological awareness training prior to working within the Project area. The biological awareness training would include a description of special-status species and sensitive habitats and identify mitigation measures that must be complied with.</p>	During Construction	Lead Agency		

**MITIGATION MONITORING AND REPORTING PROGRAM FOR THE
MODJESKA CANYON BRIDGE REPLACEMENT PROJECT**

<p>BIO-3: Contract specifications will include the following best management practices (BMPs), where applicable, to reduce erosion during construction:</p> <ul style="list-style-type: none"> • Implementation of the Project shall require approval of a site-specific Storm Water Pollution Prevention Plan (SWPPP) or Water Pollution Control Program (WPCP) that would implement effective measures to protect water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques. • Existing vegetation will be protected in place where feasible to provide an effective form of erosion and sediment control. • Roughening and terracing will be implemented to create unevenness on bare soil through the construction of furrows running across a slope, creation of stair steps, or by utilization of construction equipment to track the soil surface. Surface roughening or terracing reduces erosion potential by decreasing runoff velocities, trapping sediment, and increasing infiltration of water into the soil, and aiding in the establishment of vegetative cover from seed. • Soil exposure must be minimized through the use of temporary BMPs, groundcover, and stabilization measures. • The contractor must conduct periodic maintenance of erosion and sediment-control measures. 	<p align="center">During Construction</p>	<p align="center">Construction Contractor</p>		
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**MITIGATION MONITORING AND REPORTING PROGRAM FOR THE
MODJESKA CANYON BRIDGE REPLACEMENT PROJECT**

<p>BIO-4: To conform to water quality requirements, the Project must implement the following:</p> <ul style="list-style-type: none"> • Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must be a minimum of 50 ft. from surface waters. Any necessary equipment washing must occur where the water cannot flow into surface waters. The Project specifications will require the contractor to operate under an approved spill prevention and clean-up plan; • Construction equipment will not be operated in flowing water; • Construction work must be conducted according to site-specific construction plans that minimize the potential for sediment input to surface waters; • Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life shall be prevented from contaminating the soil or entering surface waters; • Equipment used in and around surface waters must be in good working order and free of dripping or leaking contaminants; and, • Any concrete rubble, asphalt, or other debris from construction must be taken to an approved disposal site. 	<p align="center">During Construction</p>	<p align="center">Construction Contractor</p>		
<p>BIO-5: During construction, water diversion measures (e.g., sheet piles, sandbags or coffer dams) will be utilized to prevent water from entering the work area when conducting debris removal activities within the stream channel.</p> <p>No work activities shall occur within flowing water within the OHWM of Santiago Creek. Once debris removal activities have occurred the creek channel will be graded back to pre-project conditions.</p> <p>Immediately upon completion of in-channel work, temporary fills (as needed), and any water diversion materials will be removed in a manner that minimizes disturbance to downstream flows and water quality.</p>	<p align="center">During Construction</p>	<p align="center">Construction Contractor</p>		
<p>BIO-6: Where feasible, riparian vegetation within temporary construction zones would be cleanly cut to ground level and then covered with a layer of clean gravel or topsoil as necessary to protect plant viability and prevent damage to remaining root structures during construction.</p>	<p align="center">Prior to Construction</p>	<p align="center">Construction Contractor</p>		

**MITIGATION MONITORING AND REPORTING PROGRAM FOR THE
MODJESKA CANYON BRIDGE REPLACEMENT PROJECT**

<p>BIO-7: The Project Biologist must be approved by the Carlsbad Fish and Wildlife Office (CFWO) and will be on site: (a) during all vegetation clearing, and (b) weekly during project construction within 500 feet of gnatcatcher and vireo habitat and arroyo toad critical habitat to monitor compliance with conservation measures. The biologist’s name, contact information, and work schedule on the project must be submitted to the CFWO at least 15 working days prior to initiating project impacts. The Project Biologist will be available during pre-construction and construction phases to address protection of sensitive biological resources, monitor ongoing work, and maintain communications with construction personnel to facilitate the appropriate and lawful management of issues relating to biological resources.</p> <p>The Project biologist shall submit a final report to the CFWO within 120 days of project completion including photographs of impact areas and adjacent habitat and documentation that general compliance with conservation measures was achieved. The report will list the number and location of listed species observed, observed listed species behavior, and remedial measures employed to avoid and minimize impacts to listed species. Raw field notes should be available upon request by the CFWO.</p>	<p align="center">During Construction</p>	<p align="center">Construction Contractor</p>		
<p>BIO-8: All temporary impacts to federal and state jurisdictional waters, riparian woodland and ARTO Critical Habitat during Project construction will be restored at a 1:1 ratio and will be re-contoured to preconstruction conditions and seeded with a native seed mix. Where possible, vegetation will be trimmed rather than fully removed with the guidance of the Project biologist. A restoration plan will be developed and submitted to the Carlsbad Fish & Wildlife Office. The plan will be implemented for a minimum of 5 years unless success criteria are met earlier.</p> <p>If maintenance of a riparian area occupied by vireo occurs within the nesting season, a qualified biologist will survey for vireos. Surveys will consist of three visits separated by 2 weeks. Restoration work will be allowed to continue during surveys. However, if vireos are found during visits, a qualified biologist will notify the Carlsbad Fish & Wildlife Office to identify measures to avoid and/or minimize effects.</p>	<p align="center">During and Post Construction</p>	<p align="center">Construction Contractor</p>		
<p>BIO-9: The County shall replant any mature native and non-native trees removed from within natural communities of special concern at a 2:1 ratio on-site or within the Santa Ana River watershed, due to the extent of existing development and minimal impact to native habitats resulting from the proposed Project.</p>	<p align="center">Post Construction</p>	<p align="center">Lead Agency</p>		

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<p>BIO-10: A pre-construction clearance survey for special status amphibian and reptile species shall be conducted 24-hours prior to vegetation clearing and/or initiation of construction activities. If any special status wildlife species or wildlife is found, the Project biologist shall relocate the wildlife downstream in the appropriate habitat. If a lapse in Project-related work of 15 days or longer occurs, another focused survey shall occur.</p>	<p>Prior to Construction</p>	<p>Lead Agency</p>		
<p>BIO-11: As a first order of construction, the Project contractor shall install wildlife exclusion fencing (WEF) along the Project boundaries within suitable habitat prior to commencement of construction activities or staging of equipment, in order to prevent special status amphibian and reptile species individuals from entering the Project area during construction activities.</p> <ul style="list-style-type: none"> • WEF shall consist of taught silt fencing supported by wooden stakes on the Project side only. • WEF shall be buried a minimum of six (6) inches below ground and soil shall be compacted against the sides of the fence for its entire length to prevent special status species from passing under the fence. • WEF shall extend 12 to 18 inches above the ground. • The contractor shall inspect the WEF daily, and WEF shall be maintained, and repaired where necessary, throughout construction to ensure that it is functional and without defects, that the fencing material is taught and that the bottom edge of the fencing material remains buried. • The Project biologist will periodically inspect the WEF to ensure it remains functional and appropriately maintained throughout construction. 	<p>Prior to and During Construction</p>	<p>Construction Contractor</p>		
<p>BIO-12: Prior to installation of WEF, the Project biologist shall inspect the Project area for wildlife to prevent entrapment within the Project area. If any special status wildlife species or wildlife is found, the Project biologist shall relocate the wildlife downstream in the appropriate habitat. If a lapse in Project-related work of 15 days or longer occurs, another clearance survey shall occur.</p>	<p>Prior to Construction</p>	<p>Lead Agency</p>		

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<p>BIO-13: All construction pipes, culverts, or similar structures that are stored in the Project area for one or more overnight periods shall be either securely capped prior to storage or thoroughly inspected by the contractor and/or the Project biologist for special status wildlife species or other animals before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If any special status wildlife species or wildlife is found within WEF, construction activities in the vicinity shall cease and the Project biologist shall be notified to relocate the wildlife to suitable habitat outside of the Project area. Only the approved Project biologist shall handle or relocate special status wildlife.</p>	<p>During Construction</p>	<p>Lead Agency</p>		
<p>BIO-14: To prevent inadvertent entrapment of the special status wildlife species or other animals during construction, the Project biologist and/or construction foreman/manager shall ensure all excavated, steep-walled holes or trenches more than six inches deep are provided with one or more escape ramps constructed of earthen fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals by the Project biologist and/or construction foreman/manager.</p>	<p>During Construction</p>	<p>Lead Agency</p>		
<p>BIO-15: Vegetation removal and clearing and grubbing of native habitats shall occur outside of the coastal California gnatcatcher and least Bell's vireo nesting season (February 1 to September 1).</p>	<p>Prior to and During Construction</p>	<p>Construction Contractor</p>		
<p>BIO-16: If vegetation removal is required during the migratory bird nesting season (February 1 to September 1), a pre-construction nesting bird survey must be conducted within 7 days prior to vegetation removal. Within 2 weeks of the nesting bird survey, all vegetation cleared by the Project biologist will be removed by the contractor.</p> <p>A minimum 300-foot no-disturbance buffer will be established around any active nest of migratory birds and a minimum 500-foot no-disturbance buffer will be established around any nesting raptor or CESA/FESA listed species. The contractor must immediately stop work in the buffer area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the Project biologist who is approved by the wildlife agencies) in the buffer area until a qualified biologist determines the young have fledged. A reduced buffer can be established if determined appropriate by the Project biologist who is approved by the wildlife agencies.</p>	<p>Prior to Construction</p>	<p>Construction Contractor</p>		

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<p>BIO-17: If any noise generating construction activities above the typical background noise levels within the Project area are required during the migratory bird nesting season (February 1 to September 1), the Project biologist will monitor construction activities and any known identified nest sites within or adjacent to the Project area to minimize disturbance of nesting migratory birds. If the Project biologist suspects that these measures are ineffective, culpable activities within 500 feet of active nesting territories until nesting activity is completed and fledglings are no longer in the area or until effective avoidance and minimization measures can be implemented.</p>	<p style="text-align: center;">During Construction</p>	<p style="text-align: center;">Construction Contractor</p>		
<p>BIO-18: Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds. Special care will be taken during transport, use, and disposal of soils containing invasive weed seeds, and weedy vegetation removed during construction will be properly disposed of to prevent spread into areas outside of the construction area.</p>	<p style="text-align: center;">Prior to Construction</p>	<p style="text-align: center;">Lead Agency</p>		
<p>BIO-19: All hydroseed and plant mixes must consist of a Project biologist approved plant palette seed mix of native species sourced locally to the Project area.</p>	<p style="text-align: center;">Prior to and During Construction</p>	<p style="text-align: center;">Lead Agency and Construction Contractor</p>		
CULTURAL RESOURCES				
<p>CUL-1: Prior to construction, environmental awareness training shall be provided to all construction workers onsite regarding the possibility of encountering subsurface cultural resources.</p>	<p style="text-align: center;">During Construction</p>	<p style="text-align: center;">Lead Agency</p>		
<p>CUL-2: If previously unidentified cultural materials are unearthed during construction, work shall be halted in that area until a qualified archaeologist can assess the significance of the find and develop a plan for documentation and removal of resources, if necessary. Additional archaeological survey will be needed if project limits are extended beyond the present survey limits.</p>	<p style="text-align: center;">During Construction</p>	<p style="text-align: center;">Construction Contractor</p>		

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<p>CUL-3: Section 5097.94 of the Public Resources Code and Section 7050.5 of the California Health and Safety Code protect Native American burials, skeletal remains and grave goods, regardless of age and provide method and means for the appropriate handling of such remains. If human remains are encountered, California Law requires that work shall halt in that vicinity and the Orange County Coroner shall be notified immediately to assess the remains. If the coroner determines the human remains to be of Native American origin, the coroner must notify the Native American Heritage Commission (NAHC) within twenty-four hours of such identification. The NAHC shall then determine the Most Likely Descendant (MLD) of the human remains and contact the MLD immediately. The County, the MLD, and a professional archaeologist retained by the County shall then consult to determine the appropriate plans for treatment and assessment of the human remains and any associated grave goods.</p>	<p align="center">During Construction</p>	<p align="center">Lead Agency and Construction Contractor</p>		
<p>GEOLOGY AND SOILS</p> <p>GEO-1: Paleontological Monitoring. A qualified paleontologist (the “Project Paleontologist”), as defined by the Society of Vertebrate Paleontology’s 2010 guidelines, shall be retained by the Contractor prior to the issuance of a grading permit. The Project Paleontologist will be on-call to monitor ground-disturbing activities and excavations on the Project site following identification of potential paleontological resources by Project personnel. If paleontological resources are encountered during implementation of the Project, ground-disturbing activities will be temporarily redirected from the vicinity of the find. The Project Paleontologist will be allowed to temporarily divert or redirect grading or excavation activities in the vicinity in order to make an evaluation of the find. If the resource is significant, Mitigation Measure GEO-2 shall apply.</p>	<p align="center">Prior to and During Construction</p>	<p align="center">Construction Contractor</p>		
<p>GEO-2: Paleontological Treatment Plan. If a significant paleontological resource(s) is discovered, the qualified paleontologist shall develop a plan of mitigation which shall include salvage excavation and removal of the find, removal of sediment from around the specimen (in the laboratory), research to identify and categorize the find, curation in the find a local qualified repository, and preparation of a report summarizing the find. All recommendations will be made in accordance with the Society of Vertebrate Paleontology’s 2010 guidelines and shall be subject to review and approval by the County of Orange.</p>	<p align="center">During Construction</p>	<p align="center">Lead Agency and Construction Contractor</p>		
<p>HAZARDS AND HAZARDOUS WASTE</p> <p>HAZ-1: A PSI is recommended to test for ADL, OCP, OPP, and heavy metals in soils and for LBP and ACM in the existing bridge structure prior to construction.</p>	<p align="center">Prior to Construction</p>	<p align="center">Lead Agency</p>		

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<p>HAZ-2: Any leaking transformers observed during the course of the Project should be considered a potential polychlorinated biphenyl (PCB) hazard. A detailed inspection of individual electrical transformers was not conducted for this Phase I Environmental Site Assessment. However, should leaks from electrical transformers (that will either remain within the construction limits or will require removal and/or relocation) be encountered during construction, the transformer fluid should be sampled and analyzed by qualified personnel for detectable levels of PCB's. Should PCBs be detected, the transformer should be removed and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency. Any stained soil encountered below electrical transformers with detectable levels of PCB's should also be handled and disposed of in accordance with Title 22, Division 4.5 of the California Code of Regulations and any other appropriate regulatory agency.</p>	<p align="center">During Construction</p>	<p align="center">Construction Contractor</p>		
<p>HYDROLOGY AND WATER QUALITY</p> <p>WQ-1: BMPs will be incorporated into project design and project construction to minimize impacts on the environment:</p> <ul style="list-style-type: none"> • The area of construction and disturbance shall be limited to as small an area as feasible to reduce erosion and sedimentation. • Measures shall be implemented during land-disturbing activities to reduce erosion and sedimentation. These measures may include mulches, soil binders and erosion control blankets, silt fencing, fiber rolls, temporary berms, sediment desilting basins, sediment traps, and check dams. • Existing vegetation shall be protected where feasible to reduce erosion and sedimentation. Vegetation shall be preserved by installing temporary fencing, or other protection devices, around areas to be protected. • Exposed soils shall be covered by loose bulk materials or other materials to reduce erosion and runoff during rainfall events. • All construction roadway areas shall be properly protected to prevent excess erosion, sedimentation, and water pollution. • All concrete curing activities shall be conducted to minimize spray drift and prevent curing compounds from entering the waterway directly or indirectly. • All construction materials, vehicles, stockpiles, and staging areas shall be situated outside of the creek channel. All stockpiles must be covered, as feasible. • All erosion control measures and stormwater control measures shall be properly maintained until the site has returned to a pre-construction state. • All construction materials shall be hauled off-site after completion of construction. 	<p align="center">During Construction</p>	<p align="center">Construction Contractor</p>		

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<p>WQ-2: Any requirements for additional avoidance, minimization, and/or mitigation measures will be contained in the permits obtained from required regulatory agencies.</p>	<p>Prior to Construction</p>	<p>Lead Agency</p>		
<p>WQ-3: The proposed Project will require a National Pollution Discharge Elimination System (NPDES) General Construction Permit for Discharges of stormwater associated with construction activities. A SWPPP or Water Pollution Control Plan (WPCP) will also be developed and implemented as part of the Construction General Permit.</p>	<p>During Construction</p>	<p>Lead Agency and Construction Contractor</p>		
<p>WQ-4: The construction contractor shall adhere to the SWRCB Order No. 2012-0006-DWQ NPDES Permit pursuant to Section 402 of the CWA. This permit authorizes stormwater and non-stormwater discharges from construction activities. As part of this Permit requirement, an SWPPP or WPCP will be prepared prior to construction consistent with the requirements of the RWQCB. This SWPPP shall incorporate all applicable BMPs to ensure that adequate measures are taken during construction to minimize impacts to water quality.</p>	<p>During Construction</p>	<p>Construction Contractor</p>		
<p>NOISE</p> <p>NOI-1: To minimize construction-related noise in the area, the following Best Management Practices (BMP) shall be followed:</p> <ul style="list-style-type: none"> • Construction activities will not occur between the hours of 8:00pm and 7:00am on weekdays, including Saturdays, or any time on Sunday or a Federal holiday. • Ensure all internal combustion engine equipment is equipped with the manufacturer recommended muffler. 	<p>During Construction</p>	<p>Construction Contractor</p>		
<p>TRIBAL CULTURAL RESOURCES</p> <p>Follow CUL-1 – CUL-3 under Cultural Resources above.</p>	<p>During Construction</p>	<p>Lead Agency and Construction Contractor</p>		

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<p>UTILITIES and SERVICE SYSTEMS</p> <p>UTL-1: OC Public Works shall complete and submit a construction and demolition program application to County of Orange Waste & Recycling. The application will identify and estimate the material to be recycled and demolished during construction. Compliance with the plan will be required within construction contracts. OC Public Works shall prepare a tonnage report for County of Orange Waste & Recycling.</p>	<p>Prior to and During Construction</p>	<p>Lead Agency</p>		
<p>WILDFIRE</p> <p>WF-1: The contractor shall prepare a Traffic Management Plan that includes a Project schedule with specific information on the staged construction and when only one lane will be available, vehicle restrictions during construction including if/when limitation to fire equipment access would occur, location of signage, and a map of work zone limits.</p>	<p>Prior to and During Construction</p>	<p>Lead Agency and Construction Contractor</p>		
<p>WF-2: The contractor shall prepare a Construction Fire Prevention Plan approved by the Orange County Fire Authority Fire Chief. The Construction Fire Prevention Plan shall implement fire safety measures during construction activities in compliance with the National Fire Protection Association Standard 51B and California Public Resources Code Section 4442.</p> <ul style="list-style-type: none"> • The Construction Fire Prevention Plan shall be approved by the Orange County Fire Authority Fire Chief 20 days prior to the start of construction activities. • The Construction Fire Prevention Plan shall include a details schedule of construction activities, temporary light signal hours of operation, and after work hours emergency contact information. • The Construction Fire Prevention Plan shall include emergency operational procedures for the following. <ul style="list-style-type: none"> ○ Wildland fires ○ Structural fires ○ Red flag days ○ Emergency medical services emergencies ○ Flood emergencies 	<p>During Construction</p>	<p>Construction Contractor</p>		
<p>WF-3: Hot work shall cease during Red Flag Warning periods declared by the National Weather Service.</p>	<p>During Construction</p>	<p>Construction Contractor</p>		

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<p>WF-4: In the event of a fire on the Project site, all construction activities will immediately stop, the construction crew should use the onsite fire extinguishers to extinguish the fire and dial 911 to inform fire services that a fire has occurred.</p>	<p align="center">During Construction</p>	<p align="center">Construction Contractor</p>		
<p>WF-5: The contractor shall prepare an Emergency Plan with a Project schedule, including start and end dates for construction phases. The Emergency Plan shall include emergency operational procedures for:</p> <ul style="list-style-type: none"> • Flood emergencies • Wildland Fires • EMS emergencies • Red Flag Days • Loss of power <p>The Emergency Plan shall be provided to the Orange County Fire Authority, Orange County Sherriff, and Orange County Public Works.</p>	<p align="center">During Construction</p>	<p align="center">Construction Contractor</p>		
<p>WF-6: Two weeks prior to initiation of construction activities, the contractor shall post on the community bulletin board adjacent to the Modjeska Community Center located at 28890 Modjeska Canyon Road, and mail to the homes and PO Boxes in Modjeska Canyon the following:</p> <ul style="list-style-type: none"> • Information on Orange County Fire Authority’s Ready, Set, Go! safety program • An emergency evacuation route map • The direct phone number of Orange County Fire Station number 16 and 42 	<p align="center">Prior to Construction</p>	<p align="center">Lead Agency and Construction Contractor</p>		

Chapter 6: References

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Appendix A: Air Quality Emissions Model

Road Construction Emissions Model, Version 9.0.0

Daily Emission Estimates for -> Modjeska Canyon Bridge Replacement Project														
Project Phases (Pounds)	ROG (lbs/day)	CO (lbs/day)	NOx (lbs/day)	PM10 (lbs/day)	Exhaust PM10 (lbs/day)	Fugitive Dust PM10 (lbs/day)	Total PM2.5 (lbs/day)	Exhaust PM2.5 (lbs/day)	Fugitive Dust PM2.5 (lbs/day)	SOx (lbs/day)	CO2 (lbs/day)	CH4 (lbs/day)	N2O (lbs/day)	CO2e (lbs/day)
Grubbing/Land Clearing	0.07	0.49	0.37	0.02	0.02	0.00	0.02	0.02	0.00	0.00	105.94	0.01	0.00	106.65
Grading/Excavation	0.08	0.57	1.00	0.04	0.04	0.00	0.03	0.03	0.00	0.00	446.22	0.01	0.06	462.88
Drainage/Utilities/Sub-Grade	0.07	0.49	0.37	0.02	0.02	0.00	0.02	0.02	0.00	0.00	105.94	0.01	0.00	106.65
Paving	0.08	0.59	1.20	0.05	0.05	0.00	0.03	0.03	0.00	0.01	559.65	0.01	0.07	581.62
Maximum (pounds/day)	0.08	0.59	1.20	0.05	0.05	0.00	0.03	0.03	0.00	0.01	559.65	0.01	0.07	581.62
Total (tons/construction project)	0.01	0.05	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.29	0.00	0.00	28.19

Notes:
 Project Start Year -> 2023
 Project Length (months) -> 8
 Total Project Area (acres) -> 2
 Maximum Area Disturbed/Day (acres) -> 0
 Water Truck Used? -> Yes

Phase	Total Material Imported/Exported Volume (yd ³ /day)		Daily VMT (miles/day)			
	Soil	Asphalt	Soil Hauling	Asphalt Hauling	Worker Commute	Water Truck
Grubbing/Land Clearing	0	0	0	0	80	0
Grading/Excavation	23	18	60	30	80	0
Drainage/Utilities/Sub-Grade	0	0	0	0	80	0
Paving	41	14	90	30	80	0

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.
 Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.
 CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1, 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.

Total Emission Estimates by Phase for -> Modjeska Canyon Bridge Replacement Project														
Project Phases (Tons for all except CO2e. Metric tonnes for CO2e)	ROG (tons/phase)	CO (tons/phase)	NOx (tons/phase)	PM10 (tons/phase)	Exhaust PM10 (tons/phase)	Fugitive Dust PM10 (tons/phase)	Total PM2.5 (tons/phase)	Exhaust PM2.5 (tons/phase)	Fugitive Dust PM2.5 (tons/phase)	SOx (tons/phase)	CO2 (tons/phase)	CH4 (tons/phase)	N2O (tons/phase)	CO2e (MT/phase)
Grubbing/Land Clearing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.00	0.00	0.85
Grading/Excavation	0.00	0.02	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.71	0.00	0.00	14.78
Drainage/Utilities/Sub-Grade	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.26	0.00	0.00	2.98
Paving	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.39	0.00	0.00	6.96
Maximum (tons/phase)	0.00	0.02	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.71	0.00	0.00	14.78
Total (tons/construction project)	0.01	0.05	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	27.29	0.00	0.00	25.58

PM10 and PM2.5 estimates assume 50% control of fugitive dust from watering and associated dust control measures if a minimum number of water trucks are specified.
 Total PM10 emissions shown in column F are the sum of exhaust and fugitive dust emissions shown in columns G and H. Total PM2.5 emissions shown in Column I are the sum of exhaust and fugitive dust emissions shown in columns J and K.
 CO2e emissions are estimated by multiplying mass emissions for each GHG by its global warming potential (GWP), 1, 25 and 298 for CO2, CH4 and N2O, respectively. Total CO2e is then estimated by summing CO2e estimates over all GHGs.
 The CO2e emissions are reported as metric tons per phase.

Appendix B: Aquatic Resource Delineation Report

AQUATIC RESOURCE DELINEATION REPORT

Modjeska Canyon Bridge Replacement Project Orange County Public Works Orange County, California



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Executive Summary

Orange County Public Works (County), in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the Modjeska Canyon Road Bridge (Bridge # 55C-0172) over Santiago Creek with a wider concrete slab bridge as the Modjeska Canyon Road Bridges Replacement Project (Project), located in Orange County, California. The Project will replace the existing substandard steel bridge; construction funding is provided by the Highway Bridge Program (HBP) and toll credits.

The proposed Project is located in southeastern Orange County, California, in the unincorporated community of Modjeska Canyon. The Project is within the *El Toro* U.S. Geological Survey (USGS) 7.5-minute quadrangle, Section 29, Township 5 South, Range 7 West of the San Bernardino meridian. The Project site occurs at an elevation of approximately 1,275 feet above mean sea level.

On behalf of the County, Dokken Engineering conducted a delineation to determine the extent of aquatic resources within the approximately 1.90-acre Project study area. The delineation was conducted on September 27, 2019 by Dokken Engineering biologist Andrew Dellas. Delineation procedures followed the technical methods outlined in the Corps of Engineers *Wetlands Delineation Manual* (U.S. Department of the Army, Corps of Engineers, 1987), *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008), and *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2010).

The field investigation confirmed that on-site waters are limited to Santiago Creek and total approximately 0.21 acres (690 linear feet) of potential waters of the United States were mapped as ephemeral stream.

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Acronyms and Abbreviations

amsl	Above mean sea level
BSA	Biological Study Area
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
County	Orange County Public Works
IS/MND	Initial Study/Mitigated Negative Declaration
NEPA	National Environmental Policy Act
NRCS	National Resource Conservation Service
NWI	National Wetland Inventory
OHWM	Ordinary High Water Mark
Project	Modjeska Canyon Bridge Replacement
RWQCB	Project Regional Water Quality Control Board
USACE	United States Army Corps of Engineers

Chapter 1. Introduction

The purpose of this report is to identify and describe aquatic resources in the Project Study Area. This report facilitates efforts to:

1. Avoid or minimize impacts to aquatic resources during the Project design process.
2. Document aquatic resource boundary determinations for review by regulatory authorities.
3. Provide background information regarding aquatic resources in the Project Study Area.

1.1 History

Constructed in 1935, the existing Modjeska Canyon Bridge is approximately 64 ft. long, a single span steel through girder bridge with transverse floor beams supporting a concrete deck. The through girders essentially work as the bridge barrier and are partially protected by a concrete parapet. The approach railing terminates prior to the bridge barriers or are non-existent, so the bridge girders/barriers are unprotected. The bridge is founded on concrete spread footings. Concrete wingwalls flare away from the bridge at all four corners. Two of these wingwalls are substantial in height and length and are also set on spread footings.

The bridge clear width between parapets is 20 ft. The north approach from Modjeska Canyon Road makes a sharp right curve onto the bridge. Markuson Road T-s into Modjeska Canyon Road from the east, just north of the bridge. The south approach curves slightly to the west immediately south of the bridge. The road approaches are approximately 24 ft. wide. The concrete parapets on the bridge are too narrow to function as sidewalks and are interrupted by steel flanges.

From the intersection of E. Santiago Canyon Road and Modjeska Canyon Road to the bridge there are no speed limit signs, indicating the prima facie speed limit is 55 mph. However, the narrow road and sharp curve near the bridge greatly reduces speed. The safe speed of these curves is approximately 25 mph. The most recent County traffic count in March 2018 determined the average daily traffic (ADT) at approximately 420.

Santiago Creek flows from the east, crossing under the bridge at a shallow angle, resulting in a bridge skew of approximately 22 degrees. The bridge was programmed for replacement based on the low sufficiency rating and Functional Obsolete classification due to the narrow deck.

1.2 Purpose and Need

1.2.1 Purpose

The purpose of the Project is to replace the existing deteriorated steel bridge with a new bridge in conformance with current environmental and design standards, both structurally and hydraulically, and have a life expectancy of 75 years minimum. Portions of the roadway connecting to the bridge will require widening and re-profiling to provide for a smooth transition to the new bridge.

1.2.2 Need

The road is the main access for residents of Modjeska Canyon; therefore, it is critical to keep it in service and avoid potential deficiencies that would take the bridge out of service. Seasonal floods

and wildfires occur in the Santa Ana Mountains that affect this community and quick access from the Canyon is necessary during such events.

The existing 2-lane bridge is classified as Functionally Obsolete due to the very narrow road width. The bridge must be widened to meet current standards and traffic volumes.

1.3 Project Description

The County, in cooperation with the Caltrans, is proposing to replace the Modjeska Bridge (Bridge No. 55C0172) over Santiago Creek. The Modjeska Bridge is located in Modjeska Canyon near the Cleveland National Forest. The existing bridge is a single span and crosses over Santiago Creek. The Project will replace the existing substandard steel bridge; construction funding is provided by the Highway Bridge Program (HBP) and toll credits.

The proposed replacement structure is a single span prestressed, precast concrete I girder bridge. Tall abutment walls, similar to the existing condition, will be set on spread footing foundations. Tall wing walls will be required at all corners. The replacement bridge will have 12-foot wide lanes and will include 8-foot minimum width shoulders, for a minimum total barrier to barrier width of 40 ft. Bridge barriers will be deck mounted concrete barrier Type 836.

There are no nearby pedestrian facilities or future plans to place sidewalks along Modjeska Canyon Road, but portions of Modjeska Canyon Road have sufficient dirt shoulders to provide room for pedestrians. To keep with the rural setting, there will not be sidewalks on the bridge. The bridge is on a 155 ft. horizontal curve. The precast girder construction limits the radius the outside edge of the bridge. Therefore, the shoulders will vary from 8 ft. up to 10.8 ft. The bridge will be wider at the north end to accommodate vehicles turning off the bridge onto Markuson Road to the east (Figure 3. Project Features).

Santiago Creek is an ephemeral stream that flows west under the existing bridge. The location of the stream is well defined and is currently not adjacent to the abutments during low flows. Construction will likely occur when the stream is dry and not require stream diversion. A drainage ditch runs along the southwest approach. The wider bridge may require the ditch to be realigned, and trees at bridge corners will need to be removed. The ditch will be moved slightly west in the immediate vicinity of the bridge and will quickly transition back to its current location south of the bridge.

The narrow road and limited right of way require the replacement structure be placed in the same location as the existing structure. There is a detour approximately 4 miles in length but includes a steep winding road on Modjeska Grade Road. To quickly replace the bridge the road will be closed, and the detour utilized. Contractor staging areas are anticipated to be situated on the closed portion of the existing road approaches and potentially on property just west of the north abutment.

Utilities include a waterline attached to the west side of the bridge and overhead electrical and communication lines just to the north of the north abutment. It is likely the overhead lines will not need to be relocated for construction. The waterline will need to be relocated to the new bridge.

Typical equipment for roadway construction would include heavy construction earthmoving equipment, dump trucks and pavers. Typical bridge construction equipment would include cranes, excavators, rock hammers, generators, and concrete pumps.

Chapter 2. Location

The proposed Project is located in southeastern Orange County, California, in the unincorporated community of Modjeska Canyon. The Project is within the *El Toro* USGS 7.5-minute quadrangle, Section 29, Township 5 South, Range 7 West of the San Bernardino meridian. The Project site occurs at an elevation of approximately 1,275 feet above mean sea level (**Appendix B. Project Location Map**).

Prior to field surveys, the biological study area (BSA) was defined as the proposed Project impact area (**Appendix B. Project Features Map**). The Project impact area is defined as all areas that will be temporarily or permanently impacted by the Project, including proposed right of way, construction easements, cut and fill limits, potential staging areas, and access roads. The total area of the BSA is approximately 1.90 acres.

Chapter 3. Methods

The jurisdictional delineation was conducted by Dokken Engineering biologist, Andrew Dellas on September 27, 2019. The purpose of the survey was to identify and delineate aquatic resources present within the proposed Project area. The field investigation was conducted in accordance with technical methods outlined in the Corps of Engineers *Wetlands Delineation Manual* (U.S. Department of the Army, Corps of Engineers, 1987), *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (U.S. Department of the Army, Corps of Engineers, 2008), and *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2010). Observed OHWM and wetland features were mapped in the field with a R1 GNSS Receiver and ArcGIS software. An *Arid West Ephemeral and Intermittent Streams OHWM Datasheet* was completed for each OHWM GPS location. OHWM data points were taken where primary indicators of the OHWM were delineated in accordance with the technical methods listed above.

Scientific nomenclature for plants cited in this report is in accordance with The Jepson Manual (Baldwin et al., 2012). The indicator status of plants in this report is in accordance with the National Wetland Plant List (NWPL) (Lichvar et al., 2016).

Chapter 4. Existing Conditions

4.1 Landscape Setting

The Project occurs within in unincorporated Orange County in the California Coastal Range Open Woodland-Shrub-Coniferous Forest-Meadow Province ecological subregion (M262), Southern California Mountain and Valley ecological subsection M262B (USDA 2007), and Jepson Floristic Province “Peninsular Ranges” (Jepson 2020). The elevation within the BSA is approximately 1,275 feet above mean sea level. In the vicinity of the BSA, annual temperatures range from a high of 76 degrees Fahrenheit to a low of 50 degrees Fahrenheit, and the average annual rainfall is approximately 13 inches (U.S. Climate Data 2020). The topography within the BSA is generally flat. Soil within the BSA consists of Riverwash (63.7% of the BSA) and Sorrento loam, 2 to 9 percent slopes, warm MAAT, MLRA 19 (36.3% of the BSA) (NRCS 2020). (**Appendix B. Topographic Map**).

4.2 Habitat Communities

Vegetation

The BSA is dominated by urban landscape and riparian woodland. Land use within the BSA is designated as “General Agriculture”. Dominant vegetation communities within the BSA include urban/barren, disturbed, annual grassland, stream channel, stormwater conveyance facility, coastal sage scrub, and riparian woodland (**Appendix B. Vegetation Communities within the BSA; C: Representative Photographs; Appendix D. Plant Species Observed**).

Urban/Barren

Urban/Barren habitat is man-made infrastructures, defined by the absence of any vegetation, and is constructed with gravel, compacted soil, and/or asphalt. Urban areas within the BSA are categorized as roadway (Modjeska Canyon Road) and associated pullouts and driveways along the road. No residences are within the BSA, but are adjacent to the BSA within approximately This habitat type is categorized as highly disturbed. Within the BSA, approximately 2.40 acres is classified as urban/barren.

Disturbed

Disturbed habitat occurs as unpaved landscaped areas. Disturbed habitat within the BSA consists of a graveled driveway parking area west of the bridge. Vegetation consists of sparse forbs and grasses, ornamental plantings, and coast live oak (*Quercus agrifolia*). Approximately 0.96 acres of the BSA is classified as disturbed.

Annual Grassland

Annual grassland habitat within the BSA exhibits a composition of non-native grasses including, smilo grass (*Stipa miliacea*), wild oat (*Avena fatua*), red brome (*Bromus madritensis ssp. rubens*), and non-native forbs including, black mustard (*Brassica nigra*), prostrate sandmat (*Euphorbia prostrata*), sow-thistle (*Sonchus oleraceus*), and white sweetclover (*Melilotus albus*). Approximately 0.89 acres of the BSA is classified as annual grassland.

Stream Channel – Santiago Creek

Within the BSA, the Santiago Creek stream channel was delineated using primary indicators of OHWM as described in the USACE OHWM delineation manual. The stream channel is dominated by run and riffle areas with cobble, gravel, and sand substrates. Within the

stream channel habitat, a composition of vegetation accustomed to wet conditions exists including, watercress (*Nasturtium officinale*), field horsetail (*Equisetum arvense*), California mugwort (*Artemisia douglasiana*), tall flatsedge (*Cyperus eragrostis*), and umbrella plant (*Cyperus involucratus*). Delineation results determined that approximately 0.21 acres of Santiago Creek are within the BSA.

Stormwater Conveyance Facility

Within the BSA, a stormwater conveyance facility begins along Modjeska Grade Road, continues through the BSA, and ends as a discharge point above the OHWM of Santiago Creek. The stormwater conveyance facility consists of asphalt paving and confluences with native soils at the western toe of slope for Modjeska Canyon Road. The system is considered a man-made roadside drainage feature designed to convey seasonal rainwater flows through the Project site. The stormwater conveyance facility ranges in width from approximately 1 ft. to 5 ft. Vegetation within the system was composed of ruderal and invasive species consistent with the annual grassland habitat type. Less than 0.01 acres of stormwater conveyance facility are within the BSA.

Coastal Sage Scrub

Coastal sage scrub (CSS) habitats are typified by low to moderate-sized shrubs with mesophytic leaves, flexible branches, semi-woody stems growing from a woody base, and a shallow root system. Coastal scrub within the BSA is generally composed of California sagebrush (*Artemisia californica*) and California buckwheat (*Eriogonum fasciculatum*). No CSS habitats are within the PIA. Within the BSA, approximately 1.15 acres is classified as CSS habitat.

Riparian Woodland

Riparian Woodland is a tall deciduous streamside woodland that is dominated by western sycamore (*Platanus racemosa*) and occasional white alders (*Alnus rhombifolia*). These woodland stands seldom form closed canopies and may even appear as trees scattered in a shrubby thicket. The community is associated with rocky stream beds, such as Santiago Creek, that are subject to high intensity flooding. The intermittent nature of these drainages favors western sycamore as the dominant species, but white alder increases in abundance on more perennial streams.

Within the BSA, the riparian woodland is dominated by western sycamore and white alder, with additional vegetation accustomed to generally wet conditions including Pacific willow (*Salix lasiandra*) and mule fat (*Baccharis salicifolia*). Approximately 1.08 acres of the BSA is classified as riparian woodland.

4.3 Aquatic Resources

4.3.1 Overview

Based on field survey results, and according to the United States Geological Survey (USGS) Redding 7½ minute quadrangle topographic map, the USFWS National Wetland Inventory, and the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) (Appendix E), the only water feature within the BSA is Santiago Creek. Santiago Creek is an intermittent creek that drains most of the northern Santa Ana Mountains and is a tributary to the Santa Ana River. Within the BSA, Santiago Creek maintains flows during rain events throughout the fall, winter and spring, with complete drying in late spring through early fall. The creek bed has gravelly sand alluvium substrate from 0 to 6 inches and stratified gravelly coarse sand to sandy loam from 6 to 60 inches (NRCS 2020). Within the BSA, a stormwater conveyance facility

begins along Modjeska Grade Road, continues through the BSA, and ends as a discharge point above the OHWM of Santiago Creek

4.3.2 Aquatic Features Survey Results

Stormwater Conveyance Facility

Within the Project Study Area, a stormwater conveyance facility begins along Modjeska Grade Road, continues through the PIA, and ends as a discharge point above the OHWM of Santiago Creek. The system is considered a man-made roadside drainage feature designed to convey seasonal rainwater flows through the Project site. The stormwater conveyance facility ranges in width from approximately 1 ft. to 5 ft. Delineation results determined that approximately <0.01 acres of stormwater conveyance facility are within the Project Study Area. During delineation efforts, no OHWM primary indicators were observed, and the areas of identifiable flow patterns were completely absent of water during survey efforts. Therefore, the stormwater conveyance facility would be considered ephemeral and due to the new NWPR (effective June 2020), the ephemeral stormwater facility would not be considered a WOTUS.

Santiago Creek – Intermittent Stream

Santiago creek is a tributary water of the Santa Ana River, flowing east to west through the BSA. The Santa Ana River is known as a navigable WOTUS. and with direct connectivity, Santiago Creek would also be considered a jurisdictional WOTUS. Field observations and completion of an *Arid West Ephemeral and Intermittent Streams OHWM Datasheet*, determined the extent of the OHWM of Santiago Creek (Appendix I. OHWM Datasheet). Delineation results determined that approximately 0.21 acres (690 linear feet) of Santiago Creek occur within the BSA.

The Aquatic Resources Delineation Map illustrates jurisdictional boundaries within the Project area (**Appendix A. Aquatic Resources Delineation Map**).

Table 1: Water of the U.S within the Survey Area

Site Coordinates (decimal degrees)	Aquatic Resource	Cowardin*	Aquatic Resource Size (acre)	Aquatic Resource Size (linear feet)
33.708686 N -117.636295 W	Santiago Creek (SC-1)	R4SB	0.21	690
Total			0.09	290

*Cowardin et.al. 1979

Chapter 5. References

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Appendix A – Aquatic Resources Delineation Map



Project_Study_Area
• Map Reference Points
• I359897_OHWM_Data_Point
 OHWM
Aquatic Resources
 Santiago Creek (0.21 acres)

V:\2614 Modjeska Design Env\Permis\ARDR_2021-04-29.mxd

Coordinate System: NAD 1983 UTM Zone 11
 Projection: Transverse Mercator
 Datum: North American 1983
1 inch = 75 feet

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Prepared for:
 Orange County Public Works
 601 North Ross Street
 Santa Ana, CA

Delineator: Andrew Dellas
 Delineation Date: September 27, 2019
 Aerial Photography Source: ESRI Maps Online, 2016
 This delineation of water of the United States is subject to verification by the U.S. Army Corps of Engineers (Corps). Dokken Engineering advises all parties that the delineation is preliminary until the Corps provides a written verification.

Aquatic Resource Delineation Map
 BRLO-5955 (094)
 Modjeska Canyon Road Bridge Replacement Project
 Orange County, California

Appendix B - Supporting Resources

Vicinity Map

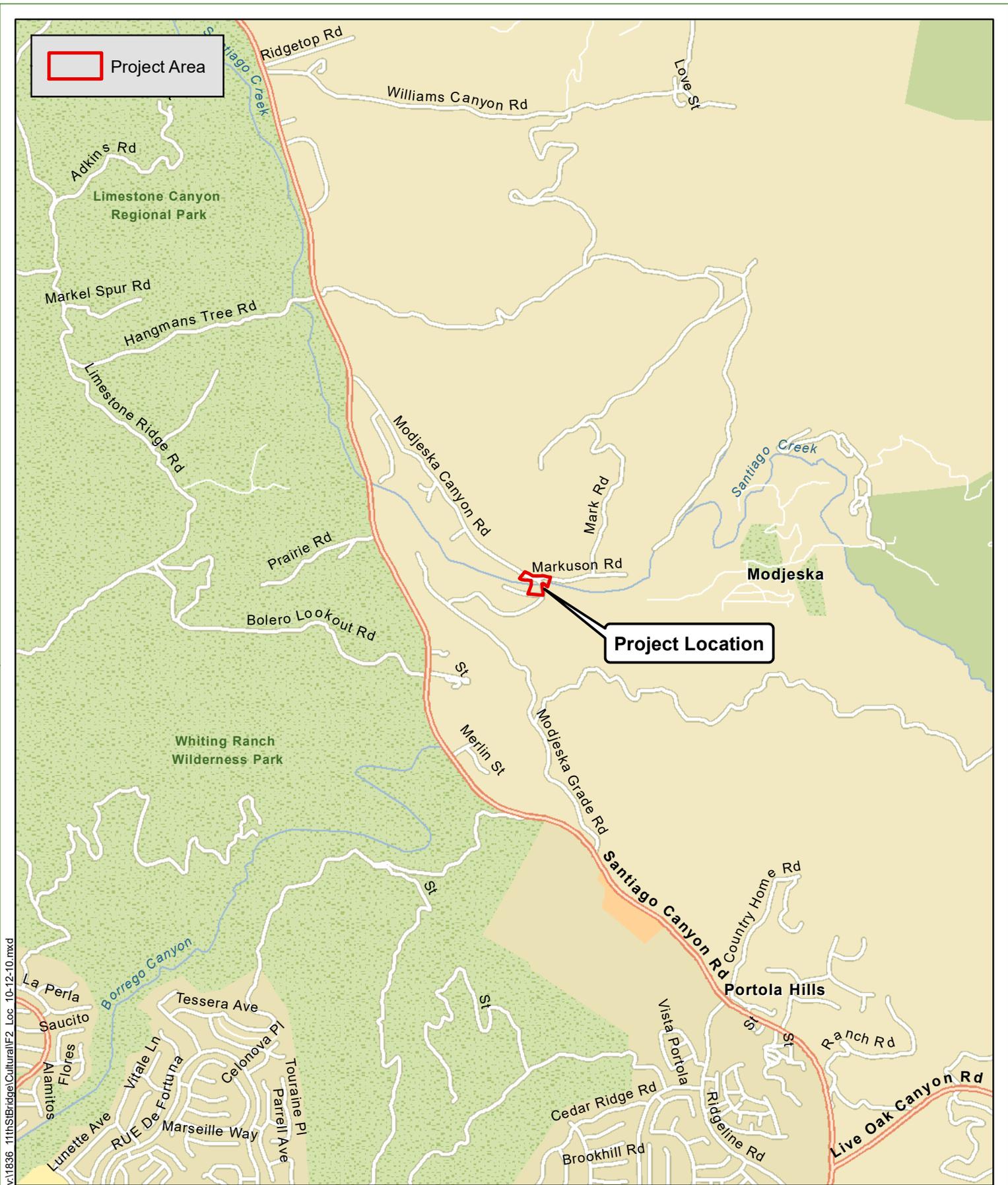
Location Map

Vegetation Communities within the BSA

Topographic Map

NRCS Web Soil Survey Report

FEMA FIRMette



v:\1836_11thStBridge\Cultural\F2_Loc_10-12-10.mxd

Source: ESRI World Street Maps Online; Dokken Engineering 9/20/2019; Created By: brianm

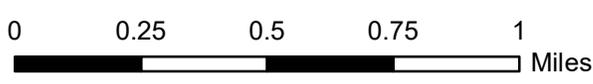
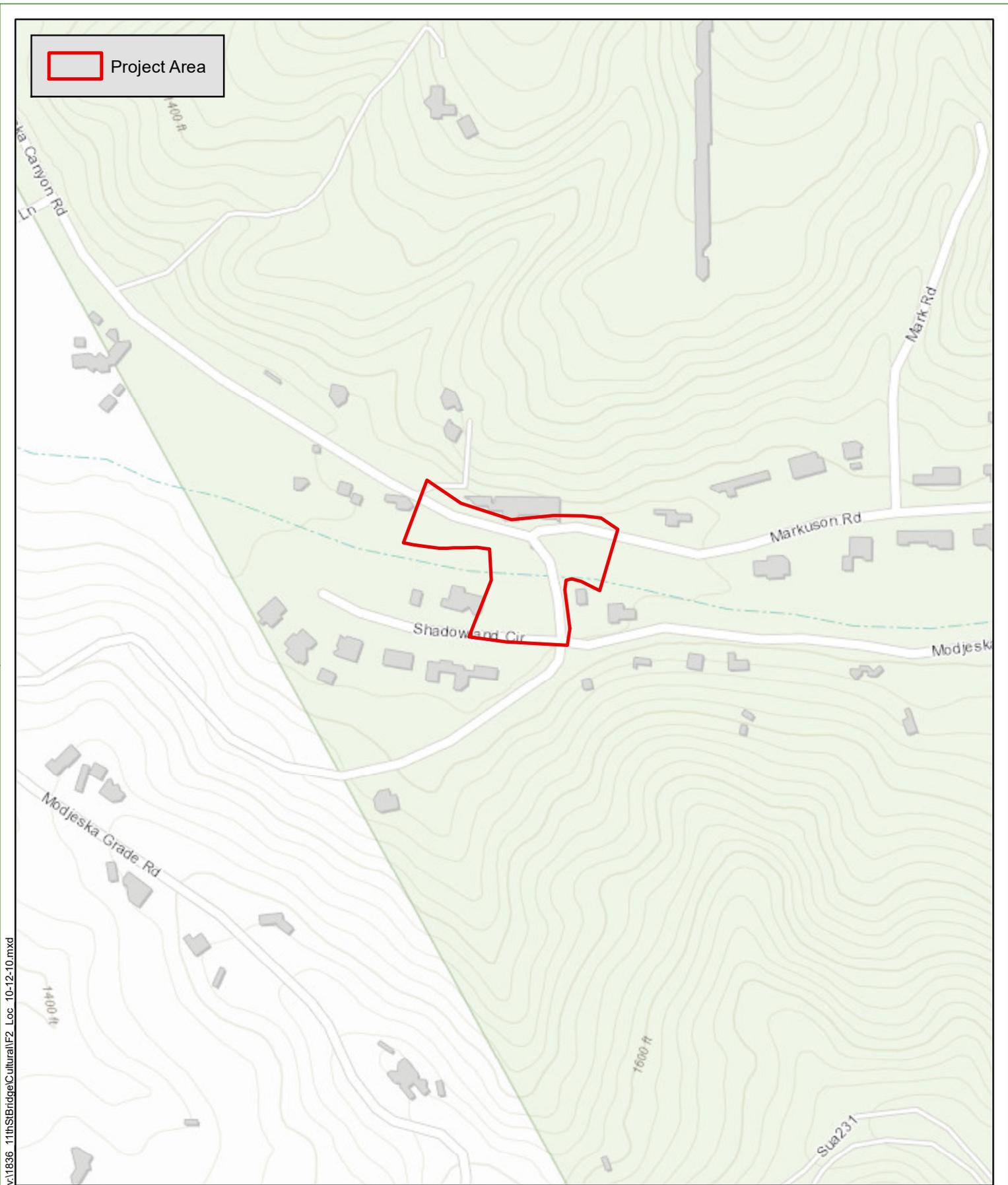


FIGURE 2
Project Location
 BRLO-5955(094)
 Modjeska Canyon Road Bridge Replacement Project
 Modjeska Canyon, Orange County, California



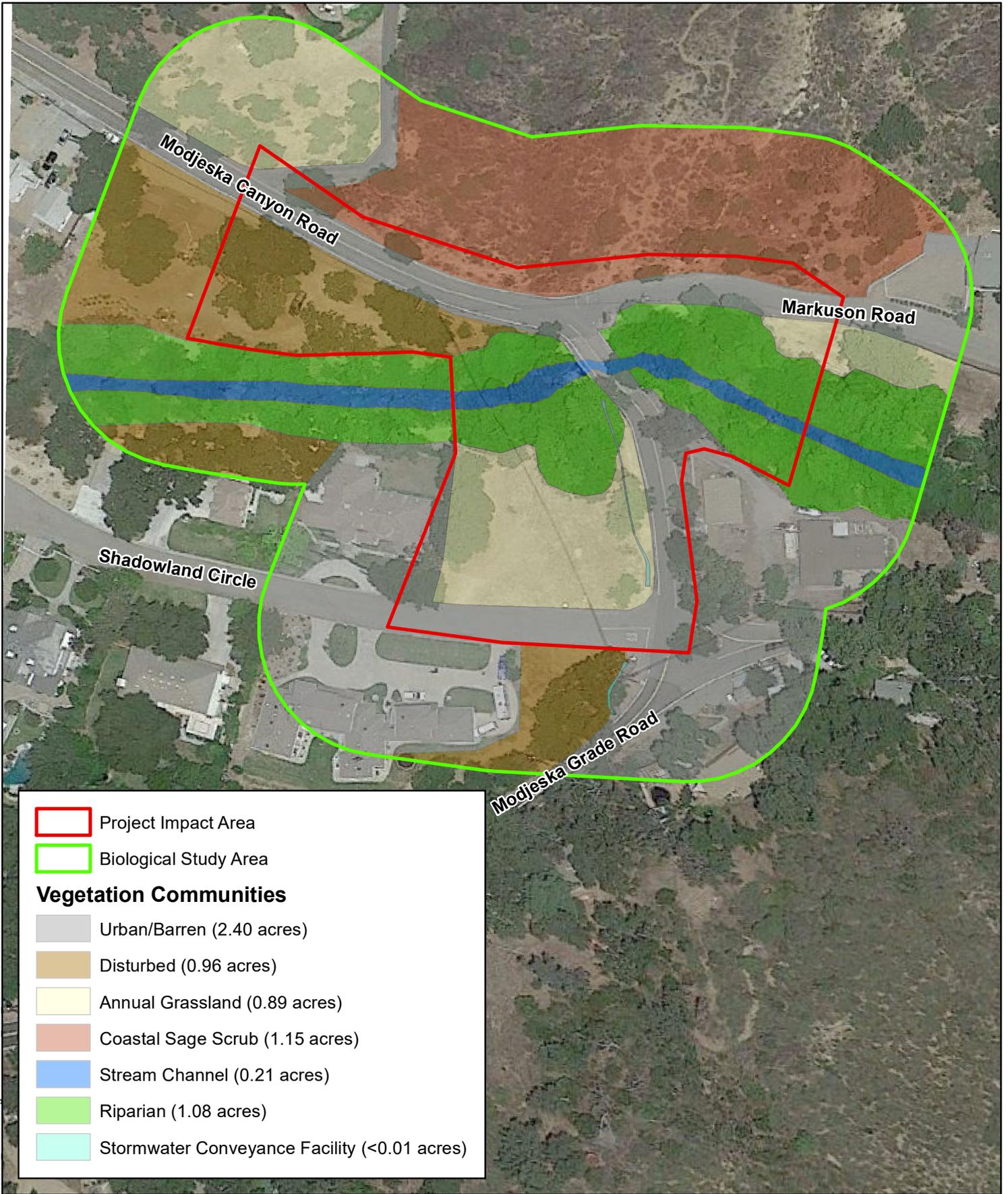
\11836_11thSI\Bridges\Cultural\F2_Loc_10-12-10.mxd

Source: ESRI World Street Maps Online; Dokken Engineering 4/29/2021; Created By: adellas



FIGURE 3
Topographic Map

BRLO-5955(094)
 Modjeska Canyon Road Bridge Replacement Project
 Modjeska Canyon, Orange County, California



\A1836 - 11thStBridge\Cultural\F2_Loc_10-12-10.mxd

Source: ESRI World Street Maps Online; Dokken Engineering 4/28/2021; Created By: adellas



1 inch = 100 feet



FIGURE 4
Vegetation Communities within the BSA

BRLO-5955(094)
 Modjeska Canyon Road Bridge Replacement Project
 Modjeska Canyon, Orange County, California

National Flood Hazard Layer FIRMette



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped
		The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

117°37'52.04"W



117°37'14.58"W

0 250 500 1,000 1,500 2,000 Feet 1:6,000

USGS The National Map: Orthoimagery. Data refreshed April, 2019.

33°42'19.77"N

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/24/2020 at 5:14:05 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Custom Soil Resource Report for Orange County and Part of Riverside County, California

Modjeska Bridge Replacement



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

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scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

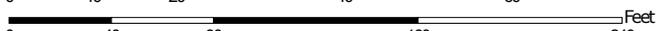
Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Map Scale: 1:897 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Orange County and Part of Riverside County, California
 Survey Area Data: Version 13, Sep 16, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Oct 25, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
191	Riverwash	1.2	63.7%
207	Sorrento loam, 2 to 9 percent slopes, warm MAAT, MLRA 19	0.7	36.3%
Totals for Area of Interest		1.9	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

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onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Orange County and Part of Riverside County, California

191—Riverwash

Map Unit Composition

Riverwash: 100 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Riverwash

Setting

Landform: Fans

Parent material: Sandy and gravelly alluvium

Typical profile

C1 - 0 to 6 inches: gravelly sand

C2 - 6 to 60 inches: stratified gravelly coarse sand to sandy loam

Properties and qualities

Slope: 0 to 5 percent

Runoff class: Negligible

Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)

Depth to water table: About 0 to 24 inches

Frequency of flooding: Frequent

Available water storage in profile: Very low (about 2.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8w

Hydric soil rating: Yes

207—Sorrento loam, 2 to 9 percent slopes, warm MAAT, MLRA 19

Map Unit Setting

National map unit symbol: 2tz0c

Elevation: 0 to 1,340 feet

Mean annual precipitation: 12 to 18 inches

Mean annual air temperature: 62 to 66 degrees F

Frost-free period: 320 to 365 days

Farmland classification: Prime farmland if irrigated

Map Unit Composition

Sorrento and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Sorrento

Setting

Landform: Alluvial fans

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Base slope

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Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from sedimentary rock

Typical profile

A - 0 to 12 inches: loam
AB - 12 to 37 inches: silty clay loam
Bk - 37 to 62 inches: silty clay loam
2C - 62 to 72 inches: sandy loam

Properties and qualities

Slope: 2 to 9 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 5 percent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water storage in profile: High (about 11.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: LOAMY (1975) (R019XD029CA)
Hydric soil rating: No

Minor Components

Mocho

Percent of map unit: 7 percent
Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Botella

Percent of map unit: 2 percent
Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: LOAMY (1975) (R019XD029CA)
Hydric soil rating: No

Pico

Percent of map unit: 2 percent
Landform: Alluvial fans
Landform position (two-dimensional): Toeslope

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Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Garretson

Percent of map unit: 2 percent
Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Anacapa

Percent of map unit: 2 percent
Landform: Alluvial fans
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

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Appendix C – Representative Photographs

Representative Photograph 1. Santiago Creek facing west from under Modjeska Canyon Road Bridge (September 27, 2019).



Representative Photograph 2. Santiago Creek and adjacent riparian woodland habitat, facing east September 27, 2019).



Representative Photograph 4. Santiago Creek facing east from on top of Modjeska Road Bridge (Santiago Creek is partially dry) (September 27, 2019).



Representative Photograph 5. Representative of grassland habitat within Project limits, facing west, north of Shadowland Circle (September 27, 2019).



Appendix D – Plant Species Observed

PLANT SPECIES OBSERVED

The table below includes a list of plant species observed within the BSAs during biological field surveys. No special-status plant species were observed.

Plant Species Observed within the BSA

Common Name	Scientific Name	Cal-IPC Rating	Wetland Indicator
Trees			
California ash	<i>Fraxinus dipetala</i>	N	FACU
Coast live oak	<i>Quercus agrifolia</i>	N	UPL
Common fig	<i>Ficus carica</i>	X [Moderate]	FACU
Fremont cottonwood	<i>Populus fremontii</i>	N	FAC
Nuttall's scrub oak	<i>Quercus dumosa</i>	N (1B.1)	UPL
Pacific willow	<i>Salix lasiandra</i>	N	FACW
Silkoak	<i>Grevillea robusta</i>	X	UPL
Western sycamore	<i>Plantanus racemose</i>	N	UPL
White alder	<i>Alnus rhombifolia</i>	N	FACW
Shrubs			
Poison hemlock	<i>Conium maculatum</i>	X [Moderate]	FACW
Poison oak	<i>Toxicodendron diversilobum</i>	N	FACU
Redberry buckthorn	<i>Rhamnus crocea</i>	N	FAC
Toyon	<i>Heteromeles arbutifolia</i>	N	UPL
Grasses			
Bermuda grass	<i>Cynodon dactylon</i>	X [Moderate]	FACU
Rabbitfoot grass	<i>Polypogon monspeliensis</i>	X [Limited]	FACW
Smilo grass	<i>Stipa miliacea</i>	X [Limited]	UPL
Forbs			
Alligator plant	<i>Kalanchoe daigremontiana</i>	X	UPL
California mugwort	<i>Artemisia douglasiana</i>	N	FAC
Common oleander	<i>Nerium oleander</i>	X	UPL
Fringed willowherb	<i>Epilobium ciliatum</i>	N	FACW
Italian thistle	<i>Carduus pycnocephalus</i>	X [Moderate]	UPL
Jimsonweed	<i>Datura stramonium</i>	X	UPL
Rough hedgenettle	<i>Stachys rigida</i>	N	FACW
Scarlet monkeyflower	<i>Erythranthe cardinalis</i>	N	UPL
Spanish false fleabane	<i>Pulicaria paludosa</i>	X	FAC
Spearmint	<i>Mentha spicata</i>	X	FACW
Sword fern	<i>Polystichum imbricans</i>	N	FACU
Vinca	<i>Vinca major</i>	X [Moderate]	UPL
Water smartweed	<i>Persicaria amphibia</i>	N	OBL
Watercress	<i>Nasturtium officinale</i>	N	OBL
White sweetclover	<i>Melilotus albus</i>	X	FACU

Appendix E – Delineation Data Sheets

OHWL Data Sheets

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: <i>Modjeska Canyon Bridge Project</i> Project Number: Stream: <i>Santiago Creek</i> Investigator(s): <i>Andrew Dallas</i>	Date: <i>9/27/19</i> Time: <i>9:45 AM</i> Town: <i>Modjeska Canyon</i> State: <i>CA</i> Photo begin file#: Photo end file#:
---	---

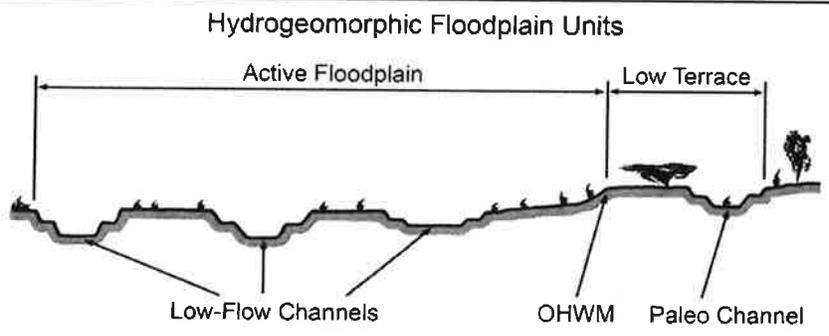
Y <input checked="" type="checkbox"/> / N <input type="checkbox"/> Do normal circumstances exist on the site? Y <input type="checkbox"/> / N <input checked="" type="checkbox"/> Is the site significantly disturbed?	Location Details: <i>33.708716°, -117.6363335°</i> Projection: <i>State Plane VI</i> Datum: Coordinates: <i>see above.</i> <i>GPS</i>
--	--

Potential anthropogenic influences on the channel system:
Modjeska Canyon Road Bridge.

Brief site description:
Santiago Creek flows through site in west to east orientation under Modjeska Canyon Road Bridge.

Checklist of resources (if available):

<input checked="" type="checkbox"/> Aerial photography Dates: <i>6/8/18 Google Maps</i> <input checked="" type="checkbox"/> Topographic maps <input type="checkbox"/> Geologic maps <input type="checkbox"/> Vegetation maps <input checked="" type="checkbox"/> Soils maps <input type="checkbox"/> Rainfall/precipitation maps <input type="checkbox"/> Existing delineation(s) for site <input checked="" type="checkbox"/> Global positioning system (GPS) <input type="checkbox"/> Other studies	<input type="checkbox"/> Stream gage data Gage number: Period of record: <input type="checkbox"/> History of recent effective discharges <input type="checkbox"/> Results of flood frequency analysis <input type="checkbox"/> Most recent shift-adjusted rating <input type="checkbox"/> Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event
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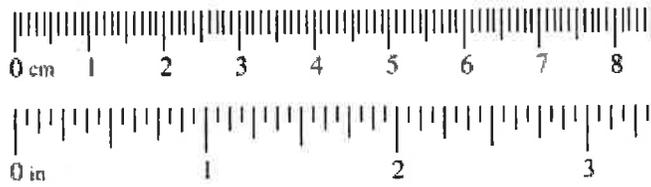


- Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:**
1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
 2. Select a representative cross section across the channel. 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:

<input type="checkbox"/> Mapping on aerial photograph	<input checked="" type="checkbox"/> GPS
<input type="checkbox"/> Digitized on computer	<input type="checkbox"/> Other:

Wentworth Size Classes

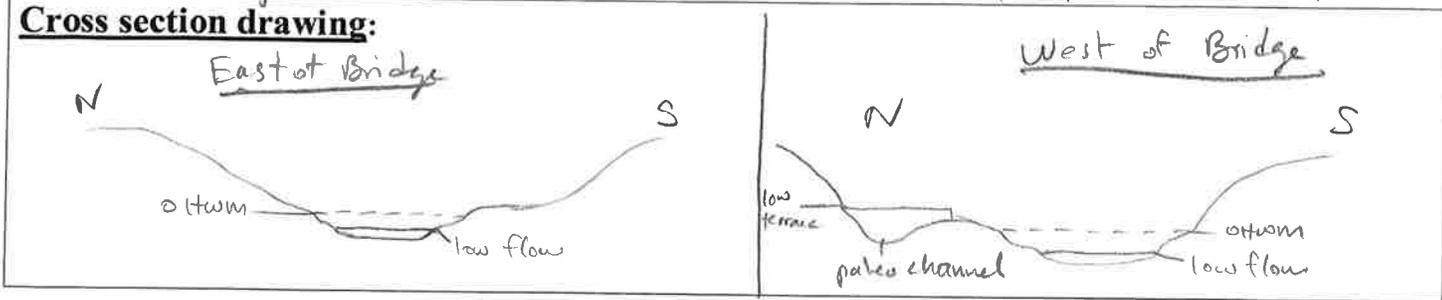
Inches (in)	Millimeters (mm)	Wentworth size class
10.08	256	Boulder
2.56	64	Cobble
0.157	4	Pebble
0.079	2.00	Granule
0.039	1.00	Very coarse sand
0.020	0.50	Coarse sand
1/2 0.0098	0.25	Medium sand
1/4 0.005	0.125	Fine sand
1/8 0.0025	0.0625	Very fine sand
1/16 0.0012	0.031	Coarse silt
1/32 0.00061	0.0156	Medium silt
1/64 0.00031	0.0078	Fine silt
1/128 0.00015	0.0039	Very fine silt
		Clay



Project ID: Modjeska Cross section ID:

Date: 9/27/17 Time: 9:45 AM

Cross section drawing:



OHWM

GPS point: OHWM 1 - OHWM

Indicators:

- Change in average sediment texture
- Change in vegetation species
- Change in vegetation cover
- Break in bank slope
- Other: Exposed Roots
- Other: _____

Comments:

No to <1% veg. cover below OHWM, early successional herbs between low-flow and OHWM. Cut slope bank with exposed roots upstream and downstream of bridge.

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: Low Flow

Characteristics of the floodplain unit:

Average sediment texture: pebble/granular/cora sand

Total veg cover: 0-1 % Tree: 0 % Shrub: 0 % Herb: 0-1 %

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: Exposed roots
- Other: _____
- Other: _____

Comments:

low flow closely within OHWM, Meandering below OHWM with <1% vegetation cover and scattered exposed roots.

Project ID: _____

Cross section ID: _____

Date: _____

Time: _____

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: _____% Tree: _____% Shrub: _____% Herb: _____%

Community successional stage:

- | | |
|---|--|
| <input type="checkbox"/> NA | <input type="checkbox"/> Mid (herbaceous, shrubs, saplings) |
| <input type="checkbox"/> Early (herbaceous & seedlings) | <input type="checkbox"/> Late (herbaceous, shrubs, mature trees) |

Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Mudcracks | <input type="checkbox"/> Soil development |
| <input type="checkbox"/> Ripples | <input type="checkbox"/> Surface relief |
| <input type="checkbox"/> Drift and/or debris | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Presence of bed and bank | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Benches | <input type="checkbox"/> Other: _____ |

Comments:

Floodplain unit: Low-Flow Channel Active Floodplain Low Terrace

GPS point: _____

Characteristics of the floodplain unit:

Average sediment texture: _____

Total veg cover: _____% Tree: _____% Shrub: _____% Herb: _____%

Community successional stage:

- | | |
|---|--|
| <input type="checkbox"/> NA | <input type="checkbox"/> Mid (herbaceous, shrubs, saplings) |
| <input type="checkbox"/> Early (herbaceous & seedlings) | <input type="checkbox"/> Late (herbaceous, shrubs, mature trees) |

Indicators:

- | | |
|---|---|
| <input type="checkbox"/> Mudcracks | <input type="checkbox"/> Soil development |
| <input type="checkbox"/> Ripples | <input type="checkbox"/> Surface relief |
| <input type="checkbox"/> Drift and/or debris | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Presence of bed and bank | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Benches | <input type="checkbox"/> Other: _____ |

Comments:

Appendix C: CNDDDB, USFWS, and CNPS Special Status Species Database Results



Selected Elements by Common Name
California Department of Fish and Wildlife
California Natural Diversity Database



Query Criteria: Quad (Orange (3311777) OR Black Star Canyon (3311776) OR Corona South (3311775) OR Tustin (3311767) OR El Toro (3311766) OR Santiago Peak (3311765))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Allen's pentachaeta <i>Pentachaeta aurea ssp. allenii</i>	PDAST6X021	None	None	G4T1	S1	1B.1
American peregrine falcon <i>Falco peregrinus anatum</i>	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
arroyo chub <i>Gila orcuttii</i>	AFCJB13120	None	None	G2	S2	SSC
arroyo toad <i>Anaxyrus californicus</i>	AAABB01230	Endangered	None	G2G3	S2S3	SSC
bald eagle <i>Haliaeetus leucocephalus</i>	ABNKC10010	Delisted	Endangered	G5	S3	FP
Belding's savannah sparrow <i>Passerculus sandwichensis beldingi</i>	ABPBX99015	None	Endangered	G5T3	S3	
Braunton's milk-vetch <i>Astragalus brauntonii</i>	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
burrowing owl <i>Athene cunicularia</i>	ABNSB10010	None	None	G4	S3	SSC
California beardtongue <i>Penstemon californicus</i>	PDSCR1L110	None	None	G3	S2	1B.2
California black rail <i>Laterallus jamaicensis coturniculus</i>	ABNME03041	None	Threatened	G3G4T1	S1	FP
California glossy snake <i>Arizona elegans occidentalis</i>	ARADB01017	None	None	G5T2	S2	SSC
California horned lark <i>Eremophila alpestris actia</i>	ABPAT02011	None	None	G5T4Q	S4	WL
California least tern <i>Sternula antillarum browni</i>	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
California Walnut Woodland <i>California Walnut Woodland</i>	CTT71210CA	None	None	G2	S2.1	
Canyon Live Oak Ravine Forest <i>Canyon Live Oak Ravine Forest</i>	CTT61350CA	None	None	G3	S3.3	
chaparral nolina <i>Nolina cismontana</i>	PMAGA080E0	None	None	G3	S3	1B.2
chaparral ragwort <i>Senecio aphanactis</i>	PDAST8H060	None	None	G3	S2	2B.2
chaparral sand-verbena <i>Abronia villosa var. aurita</i>	PDNYC010P1	None	None	G5T2?	S2	1B.1
coast horned lizard <i>Phrynosoma blainvillii</i>	ARACF12100	None	None	G3G4	S3S4	SSC



Selected Elements by Common Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
coast patch-nosed snake <i>Salvadora hexalepis virgulata</i>	ARADB30033	None	None	G5T4	S2S3	SSC
Coast Range newt <i>Taricha torosa</i>	AAAAF02032	None	None	G4	S4	SSC
coastal cactus wren <i>Campylorhynchus brunneicapillus sandiegensis</i>	ABPBG02095	None	None	G5T3Q	S3	SSC
coastal California gnatcatcher <i>Polioptila californica californica</i>	ABPBJ08081	Threatened	None	G4G5T3Q	S2	SSC
coastal whiptail <i>Aspidoscelis tigris stejnegeri</i>	ARACJ02143	None	None	G5T5	S3	SSC
Cooper's hawk <i>Accipiter cooperii</i>	ABNKC12040	None	None	G5	S4	WL
Coulter's goldfields <i>Lasthenia glabrata ssp. coulteri</i>	PDAST5L0A1	None	None	G4T2	S2	1B.1
Coulter's saltbush <i>Atriplex coulteri</i>	PDCHE040E0	None	None	G3	S1S2	1B.2
Crotch bumble bee <i>Bombus crotchii</i>	IIHYM24480	None	Candidate Endangered	G3G4	S1S2	
Davidson's saltscale <i>Atriplex serenana var. davidsonii</i>	PDCHE041T1	None	None	G5T1	S1	1B.2
estuary seablite <i>Suaeda esteroa</i>	PDCHE0P0D0	None	None	G3	S2	1B.2
ferruginous hawk <i>Buteo regalis</i>	ABNKC19120	None	None	G4	S3S4	WL
Gambel's water cress <i>Nasturtium gambelii</i>	PDBRA270V0	Endangered	Threatened	G1	S1	1B.1
grasshopper sparrow <i>Ammodramus savannarum</i>	ABPBXA0020	None	None	G5	S3	SSC
great blue heron <i>Ardea herodias</i>	ABNGA04010	None	None	G5	S4	
Hall's monardella <i>Monardella macrantha ssp. hallii</i>	PDLAM180E1	None	None	G5T3	S3	1B.3
heart-leaved pitcher sage <i>Lepechinia cardiophylla</i>	PDLAM0V020	None	None	G3	S2S3	1B.2
intermediate mariposa-lily <i>Calochortus weedii var. intermedius</i>	PMLIL0D1J1	None	None	G3G4T2	S2	1B.2
intermediate monardella <i>Monardella hypoleuca ssp. intermedia</i>	PDLAM180A4	None	None	G4T2?	S2?	1B.3
least Bell's vireo <i>Vireo bellii pusillus</i>	ABPBW01114	Endangered	Endangered	G5T2	S2	
light-footed Ridgway's rail <i>Rallus obsoletus levipes</i>	ABNME05014	Endangered	Endangered	G3T1T2	S1	FP



Selected Elements by Common Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
long-eared owl <i>Asio otus</i>	ABNSB13010	None	None	G5	S3?	SSC
long-spined spineflower <i>Chorizanthe polygonoides var. longispina</i>	PDPGN040K1	None	None	G5T3	S3	1B.2
Los Angeles sunflower <i>Helianthus nuttallii ssp. parishii</i>	PDAST4N102	None	None	G5TX	SX	1A
Malibu baccharis <i>Baccharis malibuensis</i>	PDAST0W0W0	None	None	G1	S1	1B.1
many-stemmed dudleya <i>Dudleya multicaulis</i>	PDCRA040H0	None	None	G2	S2	1B.2
mesa horkelia <i>Horkelia cuneata var. puberula</i>	PDROS0W045	None	None	G4T1	S1	1B.1
Mexican long-tongued bat <i>Choeronycteris mexicana</i>	AMACB02010	None	None	G3G4	S1	SSC
mimic tryonia (=California brackishwater snail) <i>Tryonia imitator</i>	IMGASJ7040	None	None	G2	S2	
mud nama <i>Nama stenocarpa</i>	PDHYD0A0H0	None	None	G4G5	S1S2	2B.2
northern harrier <i>Circus hudsonius</i>	ABNKC11011	None	None	G5	S3	SSC
northwestern San Diego pocket mouse <i>Chaetodipus fallax fallax</i>	AMAFD05031	None	None	G5T3T4	S3S4	SSC
orange-throated whiptail <i>Aspidoscelis hyperythra</i>	ARACJ02060	None	None	G5	S2S3	WL
Pacific pocket mouse <i>Perognathus longimembris pacificus</i>	AMAFD01042	Endangered	None	G5T1	S1	SSC
pallid bat <i>Antrozous pallidus</i>	AMACC10010	None	None	G4	S3	SSC
Plummer's mariposa-lily <i>Calochortus plummerae</i>	PMLIL0D150	None	None	G4	S4	4.2
pocketed free-tailed bat <i>Nyctinomops femorosaccus</i>	AMACD04010	None	None	G5	S3	SSC
quino checkerspot butterfly <i>Euphydryas editha quino</i>	IILEPK405L	Endangered	None	G5T1T2	S1S2	
red-diamond rattlesnake <i>Crotalus ruber</i>	ARADE02090	None	None	G4	S3	SSC
Riverside fairy shrimp <i>Streptocephalus woottoni</i>	ICBRA07010	Endangered	None	G1G2	S1S2	
Riversidian Alluvial Fan Sage Scrub <i>Riversidian Alluvial Fan Sage Scrub</i>	CTT32720CA	None	None	G1	S1.1	
Robinson's pepper-grass <i>Lepidium virginicum var. robinsonii</i>	PDBRA1M114	None	None	G5T3	S3	4.3



Selected Elements by Common Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
salt spring checkerbloom <i>Sidalcea neomexicana</i>	PDMAL110J0	None	None	G4	S2	2B.2
San Bernardino aster <i>Symphytotrichum defoliatum</i>	PDASTE80C0	None	None	G2	S2	1B.2
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	AMAFF08041	None	None	G5T3T4	S3S4	SSC
San Diego fairy shrimp <i>Branchinecta sandiegonensis</i>	ICBRA03060	Endangered	None	G2	S2	
San Fernando Valley spineflower <i>Chorizanthe parryi</i> var. <i>fernandina</i>	PDPGN040J1	None	Endangered	G2T1	S1	1B.1
San Gabriel chestnut <i>Glyptostoma gabrielense</i>	IMGASB1010	None	None	G2	S2	
San Miguel savory <i>Clinopodium chandleri</i>	PDLAM08030	None	None	G3	S2	1B.2
Santa Ana River woollystar <i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	PDPLM03035	Endangered	Endangered	G4T1	S1	1B.1
Santa Ana speckled dace <i>Rhinichthys osculus</i> ssp. <i>3</i>	AFCJB3705K	None	None	G5T1	S1	SSC
Santa Ana sucker <i>Catostomus santaanae</i>	AFCJC02190	Threatened	None	G1	S1	
Santiago Peak phacelia <i>Phacelia keckii</i>	PDHYD0C4G1	None	None	G1	S1	1B.3
south coast saltscale <i>Atriplex pacifica</i>	PDCHE041C0	None	None	G4	S2	1B.2
Southern California Arroyo Chub/Santa Ana Sucker Stream <i>Southern California Arroyo Chub/Santa Ana Sucker Stream</i>	CARE2330CA	None	None	GNR	SNR	
Southern California legless lizard <i>Anniella stebbinsi</i>	ARACC01060	None	None	G3	S3	SSC
southern California rufous-crowned sparrow <i>Aimophila ruficeps canescens</i>	ABPBX91091	None	None	G5T3	S3	WL
southern California saltmarsh shrew <i>Sorex ornatus salicornicus</i>	AMABA01104	None	None	G5T1?	S1	SSC
Southern Coast Live Oak Riparian Forest <i>Southern Coast Live Oak Riparian Forest</i>	CTT61310CA	None	None	G4	S4	
Southern Coastal Salt Marsh <i>Southern Coastal Salt Marsh</i>	CTT52120CA	None	None	G2	S2.1	
Southern Cottonwood Willow Riparian Forest <i>Southern Cottonwood Willow Riparian Forest</i>	CTT61330CA	None	None	G3	S3.2	
southern grasshopper mouse <i>Onychomys torridus ramona</i>	AMAFF06022	None	None	G5T3	S3	SSC
Southern Interior Cypress Forest <i>Southern Interior Cypress Forest</i>	CTT83230CA	None	None	G2	S2.1	



Selected Elements by Common Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Southern Riparian Forest <i>Southern Riparian Forest</i>	CTT61300CA	None	None	G4	S4	
Southern Riparian Scrub <i>Southern Riparian Scrub</i>	CTT63300CA	None	None	G3	S3.2	
Southern Sycamore Alder Riparian Woodland <i>Southern Sycamore Alder Riparian Woodland</i>	CTT62400CA	None	None	G4	S4	
southern tarplant <i>Centromadia parryi ssp. australis</i>	PDAST4R0P4	None	None	G3T2	S2	1B.1
Southern Willow Scrub <i>Southern Willow Scrub</i>	CTT63320CA	None	None	G3	S2.1	
steelhead - southern California DPS <i>Oncorhynchus mykiss irideus pop. 10</i>	AFCHA0209J	Endangered	None	G5T1Q	S1	
Stephens' kangaroo rat <i>Dipodomys stephensi</i>	AMAFD03100	Endangered	Threatened	G2	S2	
summer holly <i>Comarostaphylis diversifolia ssp. diversifolia</i>	PDERI0B011	None	None	G3T2	S2	1B.2
Tecate cypress <i>Hesperocyparis forbesii</i>	PGCUP040C0	None	None	G2	S2	1B.1
thread-leaved brodiaea <i>Brodiaea filifolia</i>	PMLIL0C050	Threatened	Endangered	G2	S2	1B.1
tricolored blackbird <i>Agelaius tricolor</i>	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
two-striped gartersnake <i>Thamnophis hammondi</i>	ARADB36160	None	None	G4	S3S4	SSC
Valley Needlegrass Grassland <i>Valley Needlegrass Grassland</i>	CTT42110CA	None	None	G3	S3.1	
western mastiff bat <i>Eumops perotis californicus</i>	AMACD02011	None	None	G4G5T4	S3S4	SSC
western pond turtle <i>Emys marmorata</i>	ARAAD02030	None	None	G3G4	S3	SSC
western spadefoot <i>Spea hammondi</i>	AAABF02020	None	None	G2G3	S3	SSC
western yellow bat <i>Lasiurus xanthinus</i>	AMACC05070	None	None	G4G5	S3	SSC
western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
white rabbit-tobacco <i>Pseudognaphalium leucocephalum</i>	PDAST440C0	None	None	G4	S2	2B.2
white-tailed kite <i>Elanus leucurus</i>	ABNKC06010	None	None	G5	S3S4	FP
yellow rail <i>Coturnicops noveboracensis</i>	ABNME01010	None	None	G4	S1S2	SSC



Selected Elements by Common Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
yellow warbler <i>Setophaga petechia</i>	ABPBX03010	None	None	G5	S3S4	SSC
yellow-breasted chat <i>Icteria virens</i>	ABPBX24010	None	None	G5	S3	SSC
Yucaipa onion <i>Allium marvinii</i>	PMLIL02330	None	None	G1	S1	1B.2
Yuma myotis <i>Myotis yumanensis</i>	AMACC01020	None	None	G5	S4	

Record Count: 107



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
Phone: (760) 431-9440 Fax: (760) 431-5901
<http://www.fws.gov/carlsbad/>

In Reply Refer To:

April 28, 2021

Consultation Code: 08ECAR00-2021-SLI-0945

Event Code: 08ECAR00-2021-E-02118

Project Name: Modjeska Canyon Bridge Replacement Project

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at:

<http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>;

<http://www.towerkill.com>; and

[http://](http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html)

www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Carlsbad Fish And Wildlife Office

2177 Salk Avenue - Suite 250

Carlsbad, CA 92008-7385

(760) 431-9440

Project Summary

Consultation Code: 08ECAR00-2021-SLI-0945

Event Code: 08ECAR00-2021-E-02118

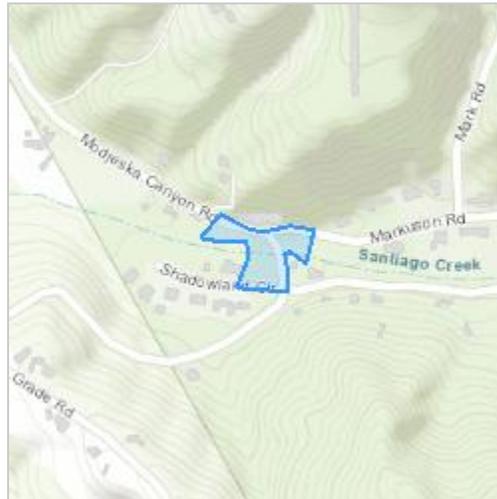
Project Name: Modjeska Canyon Bridge Replacement Project

Project Type: TRANSPORTATION

Project Description: Orange County Public Works (County), in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the Modjeska Canyon Road Bridge (Bridge No. 55C-0172) over Santiago Creek with a wider concrete slab bridge as the Modjeska Canyon Road Bridges Replacement Project (Project), located in Orange County, California.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@33.7085544,-117.63638602152504,14z>



Counties: Orange County, California

Endangered Species Act Species

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
Coastal California Gnatcatcher <i>Polioptila californica californica</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo <i>Vireo bellii pusillus</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered

Amphibians

NAME	STATUS
Arroyo (=arroyo Southwestern) Toad <i>Anaxyrus californicus</i> There is final critical habitat for this species. Your location overlaps the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3762	Endangered

Crustaceans

NAME	STATUS
Riverside Fairy Shrimp <i>Streptocephalus woottoni</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8148	Endangered

Flowering Plants

NAME	STATUS
Laguna Beach Liveforever <i>Dudleya stolonifera</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7919	Threatened
Santa Monica Mountains Dudleyea <i>Dudleya cymosa ssp. ovatifolia</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2538	Threatened
Thread-leaved Brodiaea <i>Brodiaea filifolia</i> There is final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6087	Threatened

Critical habitats

There is 1 critical habitat wholly or partially within your project area under this office's jurisdiction.

NAME	STATUS
Arroyo (=arroyo Southwestern) Toad <i>Anaxyrus californicus</i> https://ecos.fws.gov/ecp/species/3762#crithab	Final

*The database used to provide updates to the Online Inventory is under construction. [View updates and changes made since May 2019 here.](#)

Plant List

40 matches found. [Click on scientific name for details](#)

Search Criteria

California Rare Plant Rank is one of [1A, 1B, 2A, 2B, 3], Found in Quads 3311777, 3311776, 3311767, 3311766, 3311775 and 3311765;

[Modify Search Criteria](#) [Export to Excel](#) [Modify Columns](#) [Modify Sort](#) [Display Photos](#)

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Abronia villosa var. aurita	chaparral sand-verbena	Nyctaginaceae	annual herb	(Jan)Mar-Sep	1B.1	S2	G5T2?
Allium munzii	Munz's onion	Alliaceae	perennial bulbiferous herb	Mar-May	1B.1	S1	G1
Astragalus brauntonii	Braunton's milk-vetch	Fabaceae	perennial herb	Jan-Aug	1B.1	S2	G2
Atriplex coulteri	Coulter's saltbush	Chenopodiaceae	perennial herb	Mar-Oct	1B.2	S1S2	G3
Atriplex pacifica	South Coast saltscale	Chenopodiaceae	annual herb	Mar-Oct	1B.2	S2	G4
Atriplex serenana var. davidsonii	Davidson's saltscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S1	G5T1
Baccharis malibuensis	Malibu baccharis	Asteraceae	perennial deciduous shrub	Aug	1B.1	S1	G1
Brodiaea filifolia	thread-leaved brodiaea	Themidaceae	perennial bulbiferous herb	Mar-Jun	1B.1	S2	G2
Calochortus weedii var. intermedius	intermediate mariposa lily	Liliaceae	perennial bulbiferous herb	May-Jul	1B.2	S2	G3G4T2
Camissoniopsis lewisii	Lewis' evening-primrose	Onagraceae	annual herb	Mar-May(Jun)	3	S4	G4
Centromadia parryi ssp. australis	southern tarplant	Asteraceae	annual herb	May-Nov	1B.1	S2	G3T2
Centromadia pungens ssp. laevis	smooth tarplant	Asteraceae	annual herb	Apr-Sep	1B.1	S2	G3G4T2
Chorizanthe parryi var. fernandina	San Fernando Valley spineflower	Polygonaceae	annual herb	Apr-Jul	1B.1	S1	G2T1
Chorizanthe polygonoides var. longispina	long-spined spineflower	Polygonaceae	annual herb	Apr-Jul	1B.2	S3	G5T3
Chorizanthe xanti var. leucotheca	white-bracted spineflower	Polygonaceae	annual herb	Apr-Jun	1B.2	S3	G4T3

<u>Clinopodium chandleri</u>	San Miguel savory	Lamiaceae	perennial shrub	Mar-Jul	1B.2	S2	G3
<u>Comarostaphylis diversifolia ssp. diversifolia</u>	summer holly	Ericaceae	perennial evergreen shrub	Apr-Jun	1B.2	S2	G3T2
<u>Dodecahema leptoceras</u>	slender-horned spineflower	Polygonaceae	annual herb	Apr-Jun	1B.1	S1	G1
<u>Dudleya cymosa ssp. ovatifolia</u>	Santa Monica dudleya	Crassulaceae	perennial herb	Mar-Jun	1B.1	S1	G5T1
<u>Dudleya multicaulis</u>	many-stemmed dudleya	Crassulaceae	perennial herb	Apr-Jul	1B.2	S2	G2
<u>Eriastrum densifolium ssp. sanctorum</u>	Santa Ana River woollystar	Polemoniaceae	perennial herb	Apr-Sep	1B.1	S1	G4T1
<u>Hesperocyparis forbesii</u>	Tecate cypress	Cupressaceae	perennial evergreen tree		1B.1	S2	G2
<u>Hordeum intercedens</u>	vernal barley	Poaceae	annual herb	Mar-Jun	3.2	S3S4	G3G4
<u>Horkelia cuneata var. puberula</u>	mesa horkelia	Rosaceae	perennial herb	Feb-Jul(Sep)	1B.1	S1	G4T1
<u>Lasthenia glabrata ssp. coulteri</u>	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	1B.1	S2	G4T2
<u>Lepechinia cardiophylla</u>	heart-leaved pitcher sage	Lamiaceae	perennial shrub	Apr-Jul	1B.2	S2S3	G3
<u>Monardella hypoleuca ssp. intermedia</u>	intermediate monardella	Lamiaceae	perennial rhizomatous herb	Apr-Sep	1B.3	S2?	G4T2?
<u>Monardella hypoleuca ssp. lanata</u>	felt-leaved monardella	Lamiaceae	perennial rhizomatous herb	Jun-Aug	1B.2	S3	G4T3
<u>Monardella macrantha ssp. hallii</u>	Hall's monardella	Lamiaceae	perennial rhizomatous herb	Jun-Oct	1B.3	S3	G5T3
<u>Nama stenocarpa</u>	mud nama	Namaceae	annual / perennial herb	Jan-Jul	2B.2	S1S2	G4G5
<u>Nasturtium gambelii</u>	Gambel's water cress	Brassicaceae	perennial rhizomatous herb	Apr-Oct	1B.1	S1	G1
<u>Nolina cismontana</u>	chaparral nolina	Ruscaceae	perennial evergreen shrub	(Mar)May-Jul	1B.2	S3	G3
<u>Penstemon californicus</u>	California beardtongue	Plantaginaceae	perennial herb	May-Jun(Aug)	1B.2	S2	G3
<u>Pentachaeta aurea ssp. allenii</u>	Allen's pentachaeta	Asteraceae	annual herb	Mar-Jun	1B.1	S1	G4T1
<u>Phacelia keckii</u>	Santiago Peak phacelia	Hydrophyllaceae	annual herb	May-Jun	1B.3	S1	G1
<u>Pseudognaphalium leucocephalum</u>	white rabbit-tobacco	Asteraceae	perennial herb	(Jul)Aug-Nov(Dec)	2B.2	S2	G4
<u>Senecio aphanactis</u>	chaparral ragwort	Asteraceae	annual herb	Jan-Apr(May)	2B.2	S2	G3
<u>Sidalcea neomexicana</u>	salt spring checkerbloom	Malvaceae	perennial herb	Mar-Jun	2B.2	S2	G4
<u>Suaeda esteroa</u>	estuary seablite	Chenopodiaceae	perennial herb	(May)Jul-Oct(Jan)	1B.2	S2	G3
<u>Symphotrichum defoliatum</u>	San Bernardino aster	Asteraceae	perennial rhizomatous herb	Jul-Nov(Dec)	1B.2	S2	G2

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Appendix D: Special Status Species Table

Table 1. Special Status Species with Potential to Occur in the Project Vicinity

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Amphibian Species					
Arroyo toad (ARTO)	<i>Anaxyrus californicus</i>	Fed: E State: -- CDFW: SSC	Inhabits semi-arid regions near washes or intermittent streams of valley foothill, desert riparian, desert wash, or similar communities. Often associated with riparian areas containing willows, sycamores, oaks, and cottonwoods. Requires exposed sandy stream sides with stable terraces for burrowing, scattered vegetation for shelter, and sandy or gravelly bottom pools with slow moving water for breeding. Breeding is aquatic. Mating and egg laying occurs from March to July.	A	Presumed Absent: Santiago Creek is an intermittent creek with a low flow and could potentially provide adequate breeding pools and slow-moving water during the breeding season, which occurs after the rainy season. However, there are no recent (<20 years) CNDDDB occurrences within 10 miles of the BSA. In addition to the lack of recent occurrences within 10 miles, a 2019 ARTO habitat assessment and protocol presence/absence surveys for Santiago Creek, Silverado Creek, and Trabuco Creek in Orange County, CA was conducted by ICF International. Habitat assessments found that stream reaches of Santiago Creek within Modjeska Canyon are not suitable habitat for ARTO. Additionally, protocol presence/absence surveys resulted in no observations of ARTO individuals, egg strands, larvae, or juveniles, and no male ARTO calls were detected during any survey efforts. The combined findings of habitat assessments and protocol level surveys confirmed the absence of ARTO in Modjeska Canyon, Silverado Creek, Santiago Creek (from Modjeska Canyon to Irvine Lake), and most of Trabuco Creek. See ICF 2019 ARTO Results report in Appendix H for further details.

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Coast Range newt	<i>Taricha torosa</i>	Fed: -- State: -- CDFW: SSC	Most commonly inhabits wet forests, valley-foothill hardwood, valley-foothill hardwood-conifer, coastal scrub, and mixed chaparral communities, but may utilize annual grassland and mixed conifer habitats. In southern California, the species inhabits drier chaparral, oak woodlands, and grasslands. Adults require surface cover such as rocks, logs, mammal burrows, rock fissures, or human-made structures. Breeds within intermittent streams, rivers, permanent ponds, semi-permanent ponds, lakes, and large reservoirs. Breeds from fall through late spring. In the spring, adults return to subterranean summer aestivating sites; rarely travels more than 3,300 feet between aestivation burrow and breeding site. Migrations are delayed until as late as May at higher elevations of the Sierra (sea level-6,000 ft.).	HP	Low to Moderate Potential: The BSA does contain hardwood sycamore/alder riparian woodland habitat and is adjacent to sloped chaparral habitat. Santiago Creek, which runs through the BSA, is an intermittent stream and could serve as breeding habitat for the species. The nearest historic (1999) CNDDDB occurrence of the species is within the general area of the USGS 7.5-minute quadrangle of Black Star Canyon, which is approximately 3 miles north of the Project area. Additionally, a recent (2018) iNaturalist research grade observation was documented within the BSA. Due to the presence of potentially suitable habitat and local recent occurrences, the species is considered to have a low to moderate potential to occur within the BSA.
Northern leopard frog	<i>Lithobates pipiens</i>	Fed: -- State: -- CDFW: SSC	The species inhabits grassland, wet meadows, potholes, forests, woodland, brushlands, springs, canals, bogs, marshes, and reservoirs. Generally, prefers permanent water with abundant vegetation. The species is well adapted to cold conditions. Can stray far from water in summer, into habitats with sufficient vegetative cover for concealment, such as hay fields and grassy woodlands. Hibernates in winter under large, deep bodies of water that do not freeze, under rocks or logs. Breeding activities occur from March to July, after the snow melt.	A	Presumed Absent: The BSA does not contain suitable permanent water habitat for the species. Santiago Creek is an intermittent stream and cannot provide a permanent water source for the species. Additionally, there is only one historic (1957) CNDDDB occurrence of the species, approximately 6.1 miles northwest of the Project area within Irvine Lake. Due to the lack of suitable aquatic habitat and the lack of recent, nearby occurrences, the species is presumed absent.

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Western spadefoot	<i>Spea hammondi</i>	Fed: -- State: -- CDFW: SSC	Inhabits open areas with sandy or gravelly soils within mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Burrows underground from most of the year and is active above ground during rainfall. Requires vernal, shallow, temporary pools formed by heavy winter rains for reproduction. These pools must be free of bullfrogs, fish, and crayfish. Breeds from late winter to March.	HP	Low to Moderate Potential: The BSA does contain potentially suitable sandy or gravelly soils in mixed riparian woodland. There are 2 recent CNDDDB occurrences of the species within approximately 2.5 miles of the Project area to the north and south (2017 and 2003). Due to the presence of potentially suitable habitat and recent nearby occurrences the species is considered to have a low to moderate potential to occur within the BSA.
Bird Species					
American peregrine falcon	<i>Falco peregrinus anatum</i>	Fed: D State: D CDFW: FP	Inhabits riparian areas and coastal and inland wetland habitats yearlong. During the breeding season, species occurs near wetlands, lakes, rivers, or other water where it nests on high cliffs, banks, dunes, and mounds; may nest on man-made structures and occasionally tree or snag cavities. Nesting location must contain protected cliffs or ledges for cover. Nests are usually scraping or a depression or ledge in an open site. The species breeds from early March to late August.	A	Presumed Absent: The BSA does not contain suitable nesting or open foraging habitat for the species. There is only one CNDDDB occurrence of the species within the general area of the USGS 7.5-minute quadrangle of Orange, which is approximately 7.2 miles northwest of the Project area (2015). Due to the lack of suitable nesting and foraging habitat, the species is presumed absent.
Bald eagle	<i>Haliaeetus leucocephalus</i>	Fed: D State: E CDFW: FP	Species occurs near ocean shores, lakes, rivers, rangelands, and coastal wetlands for nesting and wintering; nesting occurs within one mile of a water source with abundant fish near mountain forests and woodlands. The species nests in large, old growth, or dominant live trees with open branches. Prefers ponderosa pines and often chooses the largest tree in a stand. Usually will not nest near evident human disturbance. Prefers lower elevations and not found in the high Sierra Nevada. The breeding season is from February through July.	A	Presumed Absent: The BSA does not contain suitable lakes, rivers, rangelands, or coastal wetlands for nesting or foraging. There is a CNDDDB occurrence of the species approximately 6.4 miles northwest of the Project area (2011), near Irvine Lake. Due to the lack of suitable nesting or foraging habitat, the species is presumed absent from the BSA.

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Belding's savannah sparrow	<i>Passerculus sandwichensis beldingi</i>	Fed: -- State: E CDFW: --	A southern California endemic, the species inhabits southern California coastal salt marshes year-round. It is a tidal-dependent species. Strongly associated with dense pickleweed vegetation, especially Pacific swampfire (<i>Salicornia virginica</i>). Most nests occur within the preferred pickleweed communities.	A	Presumed Absent: The BSA lacks coastal saltmarsh habitat required by the species. In addition, the nearest CNDDDB occurrence of the species is approximately 9 miles southwest of the Project area (2006). Due to the lack of suitable habitat and nearby occurrences, the species is presumed absent from the BSA.
Burrowing owl	<i>Athene cunicularia</i>	Fed: -- State: -- CDFW: SSC	The species inhabits arid, open areas with sparse vegetation cover such as deserts, abandoned agricultural areas, grasslands, and disturbed open habitats. Can be associated with open shrub stages of pinyon-juniper and ponderosa pine habitats. Nests in old small mammal burrows but may dig own burrow in soft soil. Nests are lined with excrement, pellets, debris, grass, and feathers. The species may use pipes, culverts, and nest boxes, and even buildings where burrows are scarce. Breeding occurs March through August (below 5,300 ft.).	A	Presumed Absent: The BSA does contain a small area (<0.5 acres) of annual grassland habitat. However, no burrows were identified during the biological surveys and the habitat was deemed unsuitable for burrowing owl habitation. Additionally, the nearest CNDDDB occurrence of the species is approximately 5.8 miles southwest of the Project area (2010). Due to the lack of suitable habitat and distance from local occurrences, the species is presumed absent from the BSA.
California black rail	<i>Laterallus jamaicensis coturniculus</i>	Fed: -- State: T CDFW: FP	A rare, yearlong California resident of brackish and freshwater emergent wetlands in delta and coastal locations, including the San Francisco Bay area, Sacramento-San Joaquin Delta, Morro Bay, the Salton Sea, and lower Colorado River. The species is extirpated from San Diego County and the majority of coastal southern California. Occurs in tidal emergent wetlands dominated by pickleweed, in brackish marshes dominated by bulrushes with pickleweed, and in freshwater wetlands dominated by bulrushes, cattails, and saltgrass. Species prefers high wetland areas, away from areas experiencing fluctuating water levels. Requires vegetation providing adequate overhead cover for nesting. Eggs are laid from March through June.	A	Presumed Absent: The BSA does not contain brackish or freshwater emergent wetlands and is located approximately 15 miles from the nearest delta or ocean habitat areas. There are no recent (<20 years) CNDDDB occurrences within 10 miles of the BSA, and the nearest historic (1986) CNDDDB occurrence of the species is approximately 9.4 miles west of the Project area. Due to the lack of suitable habitat and nearby occurrences, the species is presumed absent from the BSA.

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
California horned lark	<i>Eremophila alpestris actia</i>	Fed: -- State: -- CDFW: WL	Inhabits open areas with low, sparse vegetation lacking trees and large shrubs of grasslands, hills, mountain meadows, open coastal plains, fallow grain fields, alpine dwarf-shrub habitat, and alkali flats. Less common in mountain regions, on the North Coast, and in coniferous or chaparral habitats. Species is a ground nester and breeds from March through July (sea level-above the tree line).	A	Presumed Absent: The BSA does not contain open sparse vegetation areas or open plain areas. The nearest CNDDDB occurrence of the species is approximately 2.0 miles south of the Project area (2002). Due to the lack of suitable habitat, the species is presumed absent.
California least tern	<i>Sternula antillarum browni</i>	Fed: E State: E CDFW: FP	A Californian nesting migrant from April through September. Forages in near-shore ocean water and shallow estuaries and lagoons. Species nests in colonies on sandy soils with sparse vegetation along the ocean, lagoons, and bays. Breeds beginning in April.	A	Presumed Absent: The BSA does not contain suitable estuary habitat for the species, and the BSA is located approximately 15 miles from the nearest ocean access. In addition, there are no CNDDDB occurrences of the species within 10 miles of the Project area. Due to the lack of suitable habitat and location of the BSA the species is presumed absent from the BSA.
Coastal cactus wren	<i>Campylorhynchus brunneicapillus sandiegensis</i>	Fed: -- State: -- CDFW: SSC	Inhabits southern California coastal sage scrub communities. Species requires tall <i>Opuntia</i> sp. cacti (specifically prickly pear and coastal cholla) for nesting and roosting. Found in arid parts of westward-draining slopes. Breeds from March through June; frequently produces two broods per season.	A	Presumed Absent: The BSA does not contain California CSS habitat, and no prickly pear or coastal cholla cacti are present within the BSA. The nearest CNDDDB occurrence of the species is approximately 0.8 miles south of the Project area (2017). Due to the lack of suitable habitat, the species is presumed absent from the BSA despite recent, nearby occurrences.
Coastal California gnatcatcher	<i>Polioptila californica californica</i>	Fed: T State: -- CDFW: SSC	Inhabits arid washes, mesas, and slopes of coastal hills dominated by dense, low-growing, drought-deciduous shrubs and subshrubs of coastal sage scrub. May also use chaparral, grassland, and riparian communities when adjacent to or intermixed with sage scrub vegetation. Breeds February through August (sea level-2,500 feet).	HP	Low to Moderate Potential: The BSA lacks suitable dense CSS within the BSA. However, the BSA is surrounded by coast sage scrub habitat to the north and south and the species may use the riparian areas within the BSA for foraging. The nearest CNDDDB occurrence of the species is approximately 4 miles northwest of the Project area (2002). Additionally, there are

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
					4 eBird occurrences from ranging from 2007 to 2016 within 1 mile of the BSA. Due to the presence of potentially suitable marginal foraging habitat and nearby occurrences, the species is considered to have a low to moderate potential to occur within the BSA.
Grasshopper sparrow	<i>Ammodramus savannarum</i>	Fed: -- State: -- CDFW: SSC	Inhabits foothills and lowlands with dry, dense, well-drained grasslands with a variety of grasses, tall forbs, and shrubs for perches. In southern California, largely utilizes hillsides, and lower mountain slopes. Nests are composed of grasses and forbs on slight depressions in the ground. Species may form small groups when nesting. Breeds April through July (0-5,000 feet).	A	Presumed Absent: The BSA does not contain mountain slopes and it lacks suitable open grassland habitats. In addition, the nearest CNDDDB occurrence of the species is approximately 8.2 miles southwest of the Project area (2003). Due to the lack of suitable open grassland and the lack of nearby occurrences, the species is presumed absent.
Least Bell's vireo	<i>Vireo bellii pusillus</i>	Fed: E State: E CDFW: --	Summer resident of southern California inhabiting low riparian habitats in the vicinity of water and dry river bottoms. Prefers willows, baccharis, mesquite and other low, dense vegetation as nesting site. Forages in dense brush and occasionally tree tops (below 2,000 feet).	HP	Low to Moderate Potential: The BSA does contain potentially suitable riparian woodland habitat in the vicinity of water and dry river bottoms such as the intermittent Santiago Creek within the BSA. The nearest presumed extant CNDDDB occurrence of the species is approximately 3 miles south of the Project area (2017). Additionally, there is a 2015 eBird occurrence with photo documentation within 1.25 mile of the BSA. Due to the presence of potentially suitable habitat and nearby occurrences, the species is considered to have a low to moderate to occur within the BSA.
Light-footed Ridgeway's rail	<i>Rallus obsoletus levipes</i>	Fed: E State: E CDFW: FP	Inhabits southern California coastal salt marshes, lagoons, and their maritime environments. Nests in the lower littoral zone of coastal salt marshes where dense strands of cordgrass are present. Requires shallow water and mudflats for foraging, with adjacent higher vegetation for cover.	A	Presumed Absent: The BSA does not contain coastal salt marshes suitable for the species. Additionally, there are no CNDDDB occurrences of the species within 10 miles of the Project area. Due to the lack of suitable habitat and nearby occurrences, the species is presumed absent from the BSA.

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Long-eared owl	<i>Asio otus</i>	Fed: -- State: -- CDFW: SSC	Species is an uncommon yearlong resident throughout the state with the exception of the Central Valley and Southern California deserts where it is an uncommon winter visitor. Species utilizes riparian forest or thickets with dense canopied trees for roosting and nesting. Forages in open areas, woodlands, and forested habitats. At high elevations may utilize dense conifer stands. Uses old nests (usually crow, magpie, hawk, heron, squirrel) 10-50 feet above ground in tree cavities. Breeds in April to July.	A	Presumed Absent: The BSA does contain potentially suitable riparian woodland habitat. However, no large trees with suitable nesting cavities and no open foraging habitat was observed during the biological surveys. Furthermore, there are no CNDDDB occurrences of the species within 10 miles of the Project area. Due to the lack of key habitat features and the lack of recent, nearby occurrences, the species is presumed absent from the BSA.
Northern harrier	<i>Circus hudsonius</i>	Fed: -- State: -- CDFW: SSC	Species occurs in flat, or hummocky, open areas of tall, dense grasses and moist or dry shrubs. Inhabits meadows, grasslands, open rangelands, desert sinks, and fresh or saltwater emergent wetland communities. Nesting occurs on the ground within grasslands, grain fields, sagebrush or other shrubby vegetation. Nest sites are often chosen at marsh edges or in proximity to water. Breeds April through September (0-5,700 feet).	A	Presumed Absent: The BSA does contain a small area (<0.5 acres) of annual grassland habitat; however, the grassland is highly disturbed by mowing throughout the year. Additionally, there are no recent presumed extant CNDDDB occurrences of the species within 10 miles of the BSA. Due to the lack of suitable habitat and recent occurrences, the species is presumed absent from the BSA.
Southern California rufous-crowned sparrow	<i>Aimophila ruficeps canescens</i>	Fed: -- State: -- CDFW: WL	Inhabits steep, often rocky hillsides with grass and forb patches or shrubless, grassy slopes in proximity to rock outcrops of southern California coastal sage scrub and open mixed chaparral communities. Generally absent from dense, unbroken stands of coastal sage scrub and chaparral. Breeds March to June.	A	Presumed Absent: The BSA does not contain suitable rocky hillsides or grassy slopes in proximity to rock outcrops or CSS. The nearest presumed extant CNDDDB occurrence of the species is approximately 0.8 miles southeast of the Project area (2002) within suitable coastal sagebrush dominated grassland area. Due to the lack of suitable habitat, the species is presumed absent from the BSA, despite recent local occurrences.
Tricolored blackbird	<i>Agelaius tricolor</i>	Fed: -- State: T CDFW: SSC	Inhabits freshwater marsh, swamp and wetland communities, but may utilize agricultural or upland habitats that can support large colonies, often in the Central Valley area. Requires dense nesting habitat that is protected from predators,	A	Presumed Absent: The BSA does not contain open swamp and marsh habitat required by the species. In addition, the nearest recent CNDDDB occurrence is approximately 8.7 miles northwest of the

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
			is within 3-5 miles from a suitable foraging area containing insect prey and is within 0.3 miles of open water. Suitable foraging includes wetland, pastureland, rangeland, at dairy farms, and some irrigated croplands (silage, alfalfa, etc.). Nests in dense cattails, tules, willow, blackberry, wild rose, or tall herbs. Nests mid-March to early August, but may extend until October or November in the Sacramento Valley region.		Project area (2014), concentrated around Peters Canyon Reservoir. Due to the lack of suitable habitat and nearby occurrences, the species is presumed absent from the BSA.
Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	Fed: T State: E CDFW: --	Species inhabits riparian forests, along broad, lower flood bottoms of larger river systems. Nests in large blocks of riparian jungles often mixed with cottonwoods. Nesting appears to be preferred in riparian forest habitats with a dense understory; requires water near nesting site. Breeds June to August.	A	Presumed Absent: The BSA does not contain larger river systems preferred by the species. The habitat surrounding the BSA contains riparian vegetation; however, the understory is less dense than what the species is typically found in. There are no CNDDDB occurrences of the species within 10 miles of the BSA. Additionally, Santiago Creek, which runs through the BSA, is a small intermittent creek and would typically lack required water during the nesting season. Due to the lack of preferred habitat features, and distance from recent extant occurrences, the species is presumed absent from the BSA.
White-tailed kite	<i>Elanus leucurus</i>	Fed: -- State: -- CDFW: FP	Inhabits rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Prefers open grasslands, meadows or marshes for foraging close to isolated, dense-topped trees for nesting and perching. In southern California, will roost in saltgrass and Bermuda grass. Often found near agricultural lands. Nests are placed near the tops of dense oak, willow, or other tree stands. Breeds February through October.	A	Presumed Absent: The BSA does contain potentially suitable deciduous riparian woodland nesting habitat; however, the BSA and surrounding area does not exhibit necessary open grassland foraging habitat necessary for the species. The nearest CNDDDB presumed extant occurrence is approximately 6.5 miles southwest of the Project area (2009). Due to the lack of suitable foraging habitat and nearby occurrences, the species is presumed absent from the BSA.

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Yellow rail	<i>Coturnicops noveboracensis</i>	Fed: -- State: -- CDFW: SSC	Occurs in shallow marshes, wet meadows, drier fresh-water and brackish marshes, rice fields, and dense, deep grasses. The species breeds in grass- and sedge-dominated marshes and wetlands with shallow water depths. Requires standing water over a foot deep, and areas with small trees may be utilized but are not ideal. Their preferred habitat provides a layer of vegetation where they can covertly move beneath. Wintering birds frequent mature salt marshes well above the water line.	A	Presumed Absent: The BSA does not contain marsh, meadow, and wetland habitat. Santiago Creek, which runs through the BSA, lacks areas of standing water over a foot deep. Additionally, there are only historic (1914) CNDDDB occurrences within 10 miles of the BSA. The nearest presumed extant occurrence is approximately 7.2 miles north of the Project area. Due to the lack of suitable habitat and recent nearby occurrences, the species is presumed absent from the BSA.
Yellow warbler	<i>Setophaga petechia</i>	Fed: -- State: -- CDFW: SSC	Breeds in several southern California mountain ranges and throughout most of San Diego County. Species prefers to nest in areas with trees and shrubs typical of low, open-canopy riparian woodland. Species has been known to breed in riparian woodlands from coastal and desert lowlands and montane shrubbery in open conifer forests. Occurs up to 8,000 feet in the Sierra Nevada. Breeds April-August.	A	Presumed Absent: The BSA does contain open-canopy riparian woodland for the species; however, the riparian woodland habitat does not contain a heavy brush understory required for nesting. Additionally, the nearest recent presumed extant occurrence of the species is over 15 miles northwest of the BSA. Due to the lack of potentially suitable dense brush understory within the riparian woodland habitat and the lack of recent presumed extant occurrences, the species is presumed absent from the BSA.
Yellow-breasted chat	<i>Icteria virens</i>	Fed: -- State: -- CDFW: SSC	An uncommon summer resident of coastal California and in foothills of the Sierra Nevada, arriving in April and departing by late September. Requires riparian thickets of willow and other brushy tangles near watercourses for nesting and foraging. Nests in dense shrubs along streams and rivers. Breeds from May-August.	A	Presumed Absent: The BSA does contain riparian woodland habitat along the Santiago Creek corridor; however, the riparian woodland habitat lacks thickets of willow and other dense brush understory required by the species for nesting. The nearest CNDDDB occurrence of the species is approximately 4.5 miles west of the Project area (2003). Due to the lack of potentially suitable nesting habitat the species is presumed absent from the BSA.
Fish Species					

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Arroyo chub	<i>Gila orcuttii</i>	Fed: -- State: -- CDFW: SSC	The species is native in Malibu Creek and the Santa Clara, San Luis Rey, and Santa Margarita River drainages. Present (but non-native) in the Mojave River, Santa Inez River, and San Felipe Creek. Requires vegetated streams with muddy or sandy bottoms and slow moving or backwater areas. Adapted to survive in low oxygen concentrations and wide temperature fluctuations. The species feeds on algae, water fern, and invertebrates (such as insects and mollusks). Spawning occurs in pools or edge habitat from February to August with a peak in June and July.	A	Presumed Absent: The BSA does not intersect any of the known river and creek systems inhabited by the species. Furthermore, the nearest presumed extant CNDDDB occurrence (1998) is approximately 5.6 miles southeast of the Project area. Santiago Creek is an intermittent stream and lacks sufficient water flow to support the species. Due to the lack of suitable aquatic habitat and the lack of nearby occurrences, the species is presumed absent from the BSA.
Santa Ana speckled dace	<i>Rhinichthys osculus ssp. 3</i>	Fed: -- State: -- CDFW: SSC	Species inhabits the San Gabriel and Santa Ana rivers, preferring shallow gravel and cobble substrate within permanent streams or lakes with riparian cover. Prefers clear, well oxygenated water with movement from currents or waves with a supply of aquatic plants and insects. Breeds in the summer months.	A	Presumed Absent: Santiago Creek is an intermittent creek which contains shallow waters, gravelly substrate, and riparian cover. However, Santiago Creek does not have movement from currents or waves and the low water flow is unlikely to support the species. Two historic CNDDDB occurrences are listed within Santiago Creek (1998, 1999) within 1 mile of the BSA. However, surveys in 2005 did not find the species within Santiago Creek mainstem or tributaries and has been determined extirpated from the Cleveland National Forest watershed (CDFW 2015). Due to the lack of suitable aquatic habitat, and the recent surveys/reports of extirpation the species considered absent from the BSA.
Santa Ana sucker	<i>Catostomus santaanae</i>	Fed: T State: -- CDFW: --	Endemic to Los Angeles basin south coastal perennial streams. Prefers streams containing riparian vegetation, coarse substrates for algae foraging (gravel, cobble, and a mixture of gravel or cobble with sand), shallow riffle areas, deeper runs, and pools of cool, clear water. Breeds April through July.	A	Presumed Absent: Santiago Creek is an intermittent stream and does not contain deep or permanent waters to support the species. In addition, there are no CNDDDB occurrences of the species within 10 miles of the Project area. Due to the lack of suitable aquatic habitat and distance from

Common Name	Species Name	Status		General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
						the species known range, the species is presumed absent from the BSA.
Steelhead - southern California DPS	<i>Oncorhynchus mykiss irideus pop. 10</i>	Fed: State: CDFW:	E -- --	Southern California steelhead utilize rivers and creeks from Pajaro River south to Santa Maria River. Spawning occurs in coastal watersheds while rearing occurs in freshwater or estuary habitats prior to emigrating to the ocean in the winter and spring. Preferred spawning sites contain gravel substrate with sufficient water flow and riverine cover. Rearing habitat contains sufficient feeding with associated riparian forest containing willow and cottonwoods. Migration upstream for reproduction occurs from October to May with spawning occurring January to April.	A	Presumed Absent: The species is possibly extirpated from the CNDDDB occurrence within Santiago Creek, which runs through the Project area (2013). Santiago Creek is an intermittent creek and does not contain sufficient water flow to support the species. Due to the lack of suitable water flow and the species' extirpation from recent occurrences, the species is presumed absent.
Invertebrate Species						
Quino checkerspot butterfly	<i>Euphydryas editha quino</i>	Fed: State: CDFW:	E -- --	Historically inhabited coastal sage scrub habitat in southern California and northern Baja California historically. Current distribution is limited to southwestern Riverside and San Diego Counties. Larvae associated with <i>Plantago erecta</i> or <i>Castilleja exserta</i> plants. Adults emerge in early to mid-spring.	A	Presumed Absent: The species is considered extirpated from the nearest historic (1967) CNDDDB occurrence, which is approximately 5.7 miles north of the Project area. The BSA does contain CSS habitat; however, these areas are outside of the PIA and no CSS habitat would be impacted by the Project. Due to the lack of suitable habitat and the extirpation of the species from nearby occurrences, it is presumed absent from the BSA.
Riverside fairy shrimp	<i>Streptocephalus woottoni</i>	Fed: State: CDFW:	E -- --	A Ventura, Los Angeles, Orange, Riverside and San Diego County vernal pool endemic species. Inhabits deep ephemeral vernal pools greater than 12 inches within chaparral, coastal sage scrub and grassland communities. Species requires pools filled with sufficient rainfall; emerges late in the season within warm waters.	A	Presumed Absent: The BSA does not contain vernal pool habitats. In addition, the nearest CNDDDB occurrence of the species is approximately 3 miles southwest of the Project area (2005). Due to the lack of suitable habitat required by the species, the species is presumed absent from the BSA.
San Diego fairy shrimp	<i>Branchinecta sandiegonensis</i>	Fed: State: CDFW:	E -- --	Restricted to vernal pools and other ephemeral (lasting a short time) basins in coastal Orange and San Diego Counties in southern California and in northwestern Baja California. A habitat specialist found in shallower pools that range in	A	Presumed Absent: The BSA does not contain vernal pool habitats. In addition, the nearest extant CNDDDB occurrence of the species is approximately 9 miles northwest of the Project area (2006). Due to the lack of

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
			depth from 2 to 12 inches. Prefers vernal pool complexes, which typically include between 5 and 50 vernal pools. Vernal pools within a complex are generally hydrologically connected.		suitable habitat required by the species, the species is presumed absent from the BSA.
Mammal Species					
Mexican long-tongued bat	<i>Choeronycteris mexicana</i>	Fed: -- State: -- CDFW: SSC	A summer resident of San Diego County. Inhabits desert and montane riparian, desert succulent scrub, desert scrub and pinyon juniper communities. Species is primarily a nectar feeder and migrates to acquire flowering food sources; strong preference to agave and yucca. Day roosts in caves, mines, and buildings, particularly dimly-lit sites. Births in June and early July, with lactation extending to August.	A	Presumed Absent: The BSA contains riparian woodland habitat, but lacks suitable roosting sites such as caves, mines, and buildings. Additionally, there are no CNDDDB occurrences of the species within 10 miles of the Project area. Due to the lack of suitable roosting habitat and the lack of nearby occurrences, the species is presumed absent from the BSA.
Northwestern San Diego pocket mouse	<i>Chaetodipus fallax fallax</i>	Fed: -- State: -- CDFW: SSC	Within San Diego county inhabits arid coastal and desert border areas of coastal scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon-juniper, and annual grassland communities. Species strongly associated with rocky, gravelly or sandy substrates. Breeds March-May (0-6,000 feet).	A	Presumed Absent: The BSA does not contain coastal scrub, chaparral, or desert wash habitat suitable for the species. There is a recent (2016) CNDDDB occurrence of the species approximately 1 mile southeast of the Project area; within suitable coastal scrub habitat. Due to the lack of suitable habitat the species is presumed absent from the BSA.
Pacific pocket mouse	<i>Perognathus longimembris pacificus</i>	Fed: E State: -- CDFW: SSC	Inhabits sandy soils of coastal strand, coastal dunes, river alluvium, and coastal sage scrub habitats on marine terraces. Occurs within close proximity to the Pacific Ocean. Species hibernates from November to February and births April to June (0-600 feet).	A	Presumed Absent: The BSA is almost 15 miles away from the ocean and lacks maritime habitats. In addition, there are no CNDDDB occurrences of the species within 10 miles of the Project area. Due to the lack of occurrences and suitable habitat, the species is presumed absent from the BSA.
Pallid bat	<i>Antrozous pallidus</i>	Fed: -- State: -- CDFW: SSC	Inhabits low elevations of deserts, grasslands, shrub lands, woodlands, and forests year-round. Most common in open, dry habitats with rocky areas for roosting. Forages over open ground within 1-3 miles of day roosts. Prefers caves, crevices, and mines for day roosts, but	A	Presumed Absent: The BSA lacks open habitats for foraging and caves, crevices, and mines for roosting. Additionally, no roosting habitat was identified within the existing bridge structure or tree canopy. There are no recent extant occurrences

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
			may utilize hollow trees, bridges, and buildings. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites. Maternity colonies form early April and young are born April-July (below 10,000 feet).		within 10 miles of the BSA. Due to the lack of suitable roosting and foraging habitat and the lack of recent, nearby occurrences, the species is presumed absent from the BSA.
Pocketed free-tailed bat	<i>Nyctinomops femorosaccus</i>	Fed: -- State: -- CDFW: SSC	Inhabits pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis communities. Prefers rocky desert areas with high cliffs or rock outcrops and frequently selects roosts in cliff rock crevices. Species must have an adequate drop from the roost to gain flight. Maternity sites are located in rock crevices, caverns and buildings. Young are born June-July.	A	Presumed Absent: The Project area is adjacent to steeply sloped chaparral habitat; however, this area lacks rocky outcrops and high cliffs. Furthermore, there are no CNDDDB occurrences of the species within 10 miles of the Project area. Due to the lack of suitable roosting habitat and the lack of recent, nearby occurrences, the species is presumed absent from the BSA.
San Diego desert woodrat	<i>Neotoma lepida intermedia</i>	Fed: -- State: -- CDFW: SSC	The species inhabits coastal scrub of southern California, from San Diego County to San Luis Obispo County. Prefers moderate to dense canopies, rocky outcrops, rocky cliffs, and slopes. Inhabits most desert habitats, particularly Joshua tree, pinyon-juniper, mixed and chamise-redshank chaparral, and sagebrush communities. The species is active yearlong and usually nocturnal. Breeds from October to May.	A	Presumed Absent: The BSA does not contain coastal scrub, chaparral, or desert wash habitat suitable for the species. There is a recent (2016) CNDDDB occurrence of the species approximately 1 mile southeast of the Project area; within suitable chaparral habitat. Due to the lack of suitable habitat the species is presumed absent from the BSA.
Southern California saltmarsh shrew	<i>Sorex ornatus salicornicus</i>	Fed: -- State: -- CDFW: SSC	Inhabits coastal salt marshes in Los Angeles, Orange, and Ventura Counties. Specifically occurs in salt marshes dominated by <i>Salicornia spp.</i> and salt grass. In some occurrences, it is in association with willow (<i>Salix spp.</i>) and bulrush (<i>Scirpus sp.</i>). Important features of the species' habitat include dense vegetative ground cover, nesting sites above mean high tide, and moist surroundings.	A	Presumed Absent: The BSA lacks coastal salt marsh habitat, as it is almost 15 miles away from ocean habitat. Furthermore, there are no CNDDDB occurrences of the species within 10 miles of the Project area. Due to the lack of suitable habitat and nearby occurrences, the species is presumed absent from the BSA.
Southern grasshopper mouse	<i>Onychomys torridus ramona</i>	Fed: -- State: -- CDFW: SSC	Species prefers alkali and desert scrub habitats with low to moderate shrub cover and friable soils. Breeds from May to July, but may begin	A	Presumed Absent: The BSA does not contain suitable desert scrub habitats for the species. The nearest recent (2016) extant

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
			as early as January under ideal habitat conditions.		CNDDDB occurrence of the species is approximately 1.0 mile southeast of the Project area. Despite nearby occurrences, the Project area lacks open alkali and desert scrub habitats; therefore, the species is presumed absent from the BSA.
Stephens' kangaroo rat	<i>Dipodomys stephensi</i>	Fed: E State: T CDFW: --	Inhabits annual and perennial grasslands and coastal scrub or sagebrush with sparse canopy cover. Prefers sparse grassland over dense grassland habitats and species prefers buckwheat, chamise, brome grass and filaree as food sources. Species prefers sandy and gravelly soils, of level to gently sloping habitat with slopes less than 50%. Requires patches of fine-grained soils or dusty pockets for sand bathing. Burrows frequently found in clusters. Likely breeds April to June (180-4,100 feet)	A	Presumed Absent: The BSA does contain a small area (<0.5 acres) of annual grassland habitat; however, the grassland is highly disturbed by mowing throughout the year and is not adjacent coastal scrub or sagebrush. Additionally, there are no known extant occurrences within 10 miles of the BSA. Due to the lack of suitable habitat and the lack of local occurrences the species is presumed absent from the BSA.
Western mastiff bat	<i>Eumops perotis californicus</i>	Fed: -- State: -- CDFW: SSC	Inhabits many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Prefers open, rugged, rocky areas where suitable crevices are available for day roosts. Roosts in cliff face crevices (usually granite or consolidated sandstone), high buildings, trees and tunnels. Roosting sites must have a minimum 10-foot vertical drop. Births early April through August or September (sea level-8,475 feet).	A	Presumed Absent: The BSA does not contain suitable coastal scrub or chaparral habitat for the species. The BSA does contain riparian deciduous woodland; however, no suitable tree roosting habitat was identified within the BSA during biological surveys. The nearest presumed extant CNDDDB occurrence of the species is approximately 2.1 miles northwest of the Project area (date unspecified). Despite nearby occurrences, the species is presumed absent from the BSA due to the lack of suitable roosting habitat.
Western yellow bat	<i>Lasiurus xanthinus</i>	Fed: -- State: -- CDFW: SSC	Species known in California only in Los Angeles and San Bernardino Counties south to the Mexican border. Inhabits valley foothill riparian, desert riparian, desert wash, and palm oasis habitats in proximity to water. Species utilizes trees and palms for roosting and maternity colonies. Births in June and July (below 2,000 feet).	A	Presumed Absent: The BSA does contain foothill riparian woodland habitat; however, the species presumed extant range is not within Orange County and there are no CNDDDB occurrences of the species within 10 miles of the BSA. Due to the BSA being outside the species known range, the species is presumed absent from the BSA.

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Reptile Species					
California glossy snake	<i>Arizona elegans occidentalis</i>	Fed: -- State: -- CDFW: SSC	Inhabits arid scrub, rocky washes, grasslands, and chaparral. Prefers microhabitats of open areas and loose soils. A nocturnal species that hides underground in rocks and burrows during the day. The species can dig its own burrows or use existing ones. Lays from 3 to 23 eggs (more often 5 to 12) in June and July. Eggs hatch late summer and early fall. The species is found from below sea level to around 7,200 feet.	A	Presumed Absent: The BSA does not contain arid scrub, rocky washes or chaparral habitat suitable for the species. The nearest recent (2014) CNDDDB occurrence of the species is approximately 13 miles southeast of the Project area. Due to the lack of suitable microhabitats and the lack of recent, nearby occurrences, the species is presumed absent from the BSA.
Coast horned lizard	<i>Phrynosoma blainvillii</i>	Fed: -- State: -- CDFW: SSC	Inhabits valley-foothill hardwood, conifer forest, and riparian habitats, as well as pine-cypress, juniper woodland, and annual grasslands with sandy areas, washes or flood plains. Frequently found near ant hills. Egg laying occurs from May to June, and some females may lay two clutches per year (sea level-8,000 feet).	HP	High Potential: The BSA does contain potentially suitable riparian woodland habitat and sandy soils. Additionally, the nearest CNDDDB occurrence of the species is approximately 1 miles south of the Project area (2017). Due to the presence of suitable habitat and recent, nearby occurrences, the species is considered to have a high potential to occur within the BSA.
Coast patch-nosed snake	<i>Salvadora hexalepis virgultea</i>	Fed: -- State: -- CDFW: SSC	Inhabits semi-arid brushy or shrubby areas and chaparral in canyons, rocky hillsides, and plains. Species is an active forager and is susceptible to high levels of vehicle mortality. Requires small mammal burrows for refuge and overwintering sites. Egg laying probably occurs between May and August (below sea level-7,000 feet).	A	High Potential: The BSA does not contain brush or shrubby chaparral, rock hillslopes or plains suitable for the species. However, the species may use the Santiago creek habitat as a wildlife corridor. One historic (1999) presumed extant CNDDDB occurrence of the species is approximately 3.7 miles northwest of the BSA (1999). Additionally, a recent (2019) iNaturalist research grade observation was documented less than 0.5 mile east of the BSA. Due to the potential for the species to use the BSA as a wildlife corridor and the recent local occurrence, the species is considered to have a low to moderate potential to occur within the BSA.

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Coastal whiptail	<i>Aspidoscelis tigris stejnegeri</i>	Fed: -- State: -- CDFW: SSC	Inhabits hot, dry areas with sparse foliage and open areas in forests, woodland, chaparral, and riparian areas. The species is diurnal. Breeding occurs from May to August. Their diet primarily includes termites as well as other lizards, insects, spiders, scorpions, and small animals. Occurs from sea level to 7,000 feet.	HP	Low to Moderate Potential: The BSA contains riparian woodland habitat suitable for the species. The nearest recent (2008) presumed extant CNDDDB occurrence of the species is approximately 4.5 miles southwest of the BSA. Additionally, a recent (2019) iNaturalist research grade observation was documented approximately 1 mile east of the BSA. Due to the presence of potentially suitable habitat, and local recent occurrences, the species has a low to moderate potential to occur.
Orange-throated whiptail	<i>Aspidoscelis hyperythra</i>	Fed: -- State: -- CDFW: WL	Inhabits low-elevation coastal scrub, chamise-redshank chaparral, mixed chaparral, and valley-foothill hardwood habitats, especially in areas with summer morning fog. Prefers washes and other sandy areas with loose soils and patches of brush and rocks for cover and foraging. Reproduces April to July; young emerge August to September (0-3,410 feet).	HP	High Potential: The Project does contain potentially suitable hardwood riparian woodland habitat. In addition, the nearest CNDDDB occurrence of the species is approximately 1 mile south of the Project area (2016). Due to the presence of suitable habitat adjacent to the Project area and nearby, recent occurrences, the species has a low to moderate potential to occur.
Red-diamond rattlesnake	<i>Crotalus ruber</i>	Fed: -- State: -- CDFW: SSC	Inhabits coastal chaparral, oak and pine woodland, cultivated areas, and arid desert scrub communities. Requires rocky areas or areas of dense vegetation. Utilizes rodent burrows, cracks in rocks, and surface objects for cover. Species is seasonally active, with the greatest activity occurring from March to June. Young are live-born from mid-August to October in quiet, safe locations (0-3,000 feet).	A	High Potential: The Project area does contain potentially suitable rocky areas through the Santiago Creek corridor. The nearest recent CNDDDB occurrence of the species is approximately 4 miles southeast of the Project area (2001), and a recent (2017) iNaturalist research grade observation is approximately 1 mile from the BSA. Due to the presence of potentially suitable habitat and local recent occurrences, the species has a low to moderate potential to occur within the BSA.
Southern California legless lizard	<i>Anniella stebbinsi</i>	Fed: -- State: -- CDFW: SSC	Occurs in moist, warm, loose soil with plant cover. Moisture is essential. Occurs in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands, desert scrub, sandy	HP	Low to Moderate Potential: The BSA contains Santiago Creek, and the stream surroundings may provide suitable moist habitat with sandy soils and cover objects

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
			washes, and stream terraces with sycamores, cottonwoods, or oaks. Leaf litter under trees and bushes in sunny areas and dunes stabilized with bush lupine and mock heather often indicate suitable habitat. Often can be found under surface objects such as rocks, boards, driftwood, and logs. Can also be found by gently raking leaf litter under bushes and trees. Sometimes found in suburban gardens in Southern California.		such as leaf litter from oaks, sycamores, willow and alder. The nearest historic (1970) CNDDDB occurrence of the species is approximately 2.7 miles northwest of the Project area, and a recent (2019) iNaturalist research grade observation is approximately 6.2 miles east of the BSA. Due to the presence of potentially suitable habitat, with historic and recent presumed extant occurrences, the species is considered to have a low to moderate potential to occur within the BSA.
Two-striped gartersnake	<i>Thamnophis hammondi</i>	Fed: -- State: -- CDFW: SSC	Species is diurnal, highly aquatic, and inhabits locations in proximity to permanent or semi-permanent bodies of water bordered by dense vegetation. Can be found around pools, creeks, cattle tanks, and other water sources. Associated with oak woodland, chaparral, brushland, and coniferous forest. Seasonally alters habitats: in summer, occupies streamside sites, and in winter, occupies nearby uplands. Thought to utilize holes, mammal burrows, crevices, and surface objects as night cover. Life young are born in late July and August, usually in secluded sites, such as under the loose bark of rotting logs or in dense vegetation near pond or stream margins (0-7,000 feet).	HP	High Potential: The BSA contains Santiago Creek, and the stream surroundings may provide suitable habitat for the species. The nearest CNDDDB occurrence of the species is approximately 0.5 mile northwest of the Project area (2003), and a recent (2018) iNaturalist research grade observation is approximately 3.5 miles northeast of the BSA. Due to the presence of potentially suitable habitat and recent presumed extant occurrences, the species is considered to have a low to moderate potential to occur within the BSA.
Western pond turtle	<i>Emys marmorata</i>	Fed: -- State: -- CDFW: SSC	A fully aquatic turtle of ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches with aquatic vegetation. Suitable habitat includes woodland, forests, and grasslands. Requires logs, rocks, cattail mats, and exposed banks for basking. Suitable upland habitat (sandy banks or grassy open field) is required for reproduction, which begins in April and ends with egg laying as late as August (sea level to 4,700 feet).	HP	Low to Moderate Potential: The BSA contains Santiago Creek, an intermittent stream which does not provide permanent aquatic habitat for the species. However, the stream may provide habitat from fall to spring when the stream does carry water. There are multiple presumed extant occurrences within 5 miles of the BSA. Due to the presence of potentially suitable habitat and presumed extant occurrences,

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
					the species is considered to have a low to moderate potential to occur within the BSA.
Plant Species					
Allen's pentachaeta	<i>Pentachaeta aurea ssp. allenii</i>	Fed: -- State: -- CNPS: 1B.1	An annual herb endemic to California, inhabiting coastal scrub, foothill grassland, valley grassland, and southern oak woodland communities. Blooms March-June (250-1,700 feet).	A	Presumed Absent: The BSA does contain a small area (<0.5 acres) of annual grassland habitat; however, the grassland is highly disturbed by mowing throughout the year. The nearest CNDDDB occurrence of the species is approximately 4.4 miles northwest of the Project area (2003). Due to the lack of suitable habitat, the species is presumed absent.
Braunton's milk-vetch	<i>Astragalus brauntonii</i>	Fed: E State: -- CNPS: 1B.1	A perennial herb inhabiting disturbed areas in chaparral, valley grassland, and coastal sage scrub communities. Usually occurs in sandstone soils with carbonate layers. Flowers January-August (15-2,000 feet).	A	Presumed Absent: The BSA does contain a small area (<0.5 acres) of annual grassland habitat; however, the grassland is highly disturbed by mowing throughout the year communities. Areas of CSS do occur within the BSA; however, this habitat type is outside of the PIA and no effects to CSS would occur. The nearest CNDDDB occurrence of the species is approximately 7.6 miles northwest of the Project area (2012). Due to the lack of suitable habitat, the species is presumed absent.
California beardtongue	<i>Penstemon californicus</i>	Fed: -- State: -- CNPS: 1B.2	A perennial herb native to California inhabiting chaparral, yellow pine forest, and pinyon/juniper woodland communities. Blooms May-June (3,900-7,500 feet).	A	Presumed Absent: The only nearby historic (1981) CNDDDB occurrence is 9.8 miles northwest of the Project area. Additionally, the BSA is outside the species' known elevation range. Due to the elevation of the BSA and the lack of suitable habitat, the species is presumed absent.
Chaparral nolina	<i>Nolina cismontana</i>	Fed: -- State: -- CNPS: 1B.2	A shrub inhabiting dry chaparral habitats of coastal mountains. Flowers May-July (650-4,270 feet).	A	Presumed Absent: The BSA does not contain chaparral habitat suitable for the species. The nearest CNDDDB occurrence of the species is approximately 0.4 miles southeast of the Project area (2012). Despite nearby occurrences, the species is

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
					presumed absent due to the lack of suitable habitat within the Project area.
Chaparral ragwort	<i>Senecio aphanactis</i>	Fed: -- State: -- CNPS: 2B.2	An annual herb native to California and Baja California, inhabiting alkaline soils in cismontane woodland, coastal scrub, and chaparral communities. Blooms January-May (50-2,600 feet).	A	Presumed Absent: The BSA does not contain chaparral and coastal scrub communities. The nearest historic (1989) CNDDDB occurrence of the species is approximately 5.1 miles west of the Project area. Due to the lack of suitable habitat, the species is presumed absent.
Chaparral sand-verbena	<i>Abronia villosa var. aurita</i>	Fed: -- State: -- CNPS: 1B.1	An annual herb inhabiting sandy soils of chaparral, coastal sage scrub, and desert dune communities. Flowers March-September (250-5,250 feet).	A	Presumed Absent: The BSA does contain CSS; however, this habitat type is outside of the PIA and no effects to CSS would occur. In addition, there are no CNDDDB occurrences of the species within 10 miles of the Project area. Due to the lack of habitat, the species is presumed absent.
Coulter's saltbush	<i>Atriplex coulteri</i>	Fed: -- State: -- CNPS: 1B.2	A perennial herb native to California and Baja California, inhabiting coastal dunes, coastal strand, valley grassland, coastal sage scrub, and occasionally wetland communities. Blooms March-October (0-1,640 feet).	A	Presumed Absent: The BSA does not contain coastal dunes or strand. A small portion of the BSA contains CSS communities; however, this habitat type is outside of the PIA and no effects to CSS would occur. Additionally, there are no CNDDDB occurrences of the species within 10 miles of the Project area. Due to the lack of habitat and occurrences, the species is presumed absent.
Coulter's goldfields	<i>Lasthenia glabrata ssp. coulteri</i>	Fed: -- State: -- CNPS: 1B.1	An annual herb inhabiting playas, coastal salt marshes, swamps, and vernal pool communities. Flowers from February-June (0-4,000 feet).	A	Presumed Absent: The BSA does not contain coastal salt marsh and vernal pool communities. Additionally, there are no CNDDDB occurrences of the species within 10 miles of the Project area. Due to the lack of habitat and occurrences, the species is presumed absent.
Davidson's saltscale	<i>Atriplex serenana var. davidsonii</i>	Fed: -- State: -- CNPS: 1B.2	An annual herb inhabiting alkaline bluffs of coastal bluff scrub or coastal scrub communities. Flowers April-October (30-660 feet).	A	Presumed Absent: The BSA does not contain coastal bluff habitat and there are no CNDDDB occurrences of the species within 10 miles of the Project area. Additionally, the BSA is outside the species' known

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
					elevation range. Due to the lack of habitat and occurrences, the species is presumed absent.
Estuary seablite	<i>Suaeda esteroa</i>	Fed: -- State: -- CNPS: 1B.2	A perennial herb native to California and Baja California, inhabiting coastal salt marsh and wetland-riparian communities. Blooms May-October (0-20 feet).	A	Presumed Absent: The BSA lacks coastal salt marsh communities. There are no CNDDDB occurrences of the species within 10 miles of the Project area. Additionally, the BSA is at a higher elevation than the species' preferred range. Due to the lack of habitat and occurrences, the species is presumed absent.
Felt-leaved monardella	<i>Monardella hypoleuca lanata</i> ssp.	Fed: -- State: -- CNPS: 1B.2	A perennial herb native to California and Baja California, inhabiting chaparral and cismontane woodland communities. Blooms May-October (980-5,200 feet).	A	Presumed Absent: The BSA does not contain chaparral or cismontane woodland habitat suitable for the species. Additionally, there are no CNDDDB occurrences of the species within 10 miles of the Project area. Due to the lack of suitable habitat and occurrences, the species is presumed absent.
Gambel's water cress	<i>Nasturtium gambelii</i>	Fed: E State: T CNPS: 1B.1	A perennial rhizomatous herb inhabiting fresh or brackish marshes and swamps. Flowers April-October (15-1,100 feet).	A	Presumed Absent: The BSA does not contain marshes and swamps. Additionally, there are no CNDDDB occurrences of the species within 10 miles of the Project area. Due to the lack of habitat and occurrences, the species is presumed absent.
Hall's monardella	<i>Monardella macrantha hallii</i> ssp.	Fed: -- State: -- CNPS: 1B.3	A perennial rhizomatous herb endemic to California, inhabiting chaparral, foothill woodland, yellow pine forest, mixed evergreen forest, and valley grassland communities. Blooms June-October (2,400-7,200 feet).	A	Presumed Absent: The nearest CNDDDB occurrence of the species is approximately 4.8 miles east of the BSA (2004). All nearby occurrences of the species are concentrated in this location, around Santiago Peak. Additionally, the BSA is below the species' known elevation range. Due to the elevation of the BSA and the species' pattern of occurrence, it is presumed absent.
Heart-leaved pitcher sage	<i>Lepechinia cardiophylla</i>	Fed: -- State: -- CNPS: 1B.2	A shrub inhabiting chaparral, foothill woodlands and close-cone pine forest. Flowers April-July (2,000-3,940 feet).	A	Presumed Absent: The nearest CNDDDB occurrence of the species is approximately 6.7 miles east of the BSA (2016). All nearby

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
					occurrences of the species are concentrated in high elevation habitat of the Santa Ana Mountains. The BSA is below the species known elevation range. Due to the elevation of the BSA and the species' pattern of occurrence, it is presumed absent.
Intermediate mariposa-lily	<i>Calochortus weedii intermedius</i> var.	Fed: -- State: -- CNPS: 1B.2	A perennial bulbiferous herb inhabiting calcareous soils and dry, rocky, open slopes within chaparral, coastal scrub, and valley and foothill grassland communities. Flowers May-July (350-2,800 feet).	A	Presumed Absent: The BSA does not contain rocky, open slopes within chaparral or coastal scrub habitat. The nearest CNDDDB occurrence of the species is approximately 0.25 miles southeast of the Project area (2010). Despite nearby occurrences, the species is presumed absent due to the lack of suitable habitat.
Intermediate monardella	<i>Monardella hypoleuca intermedia</i> ssp.	Fed: -- State: -- CNPS: 1B.3	A perennial herb inhabiting chaparral, cismontane woodland and occasionally lower montane coniferous forest on dry slopes. Flowers April-September (1,300- 4,100 feet).	A	Presumed Absent: The Project area lacks suitable chaparral and woodland communities for the species. The nearest CNDDDB occurrence of the species is approximately 0.4 miles southeast of the Project area (2008). Despite nearby occurrences, the species is presumed absent due to the lack of suitable habitat.
Laguna beach liveforever	<i>Dudleya stolonifera</i>	Fed: T State: T CNPS: 1B.1	A perennial herb endemic to California, inhabiting rocky soils in chaparral, valley grassland, foothill grassland, foothill woodland, and coastal sage scrub communities. Flowers May-July (30-850 feet).	A	Presumed Absent: There are no CNDDDB occurrences of the species within 10 miles of the Project area. Additionally, the BSA is outside the species' preferred elevation range. Due to the elevation of the BSA and the lack of occurrences, the species is presumed absent.
Lewis' evening-primrose	<i>Camissoniopsis lewisii</i>	Fed: -- State: -- CNPS: 3	An annual herb inhabiting sandy or clay soils of coastal grassland, coastal bluff scrub, cismontane woodland, coastal dunes, valley and foothill grassland, and coastal scrub communities. Flowers March-June (0-990 feet).	A	Presumed Absent: The BSA lacks coastal grassland or bluff scrub habitat suitable for the species. There are no CNDDDB occurrences of the species within 10 miles of the Project area. Additionally, the BSA is outside the species' known elevation range. Due to the lack of habitat and occurrences, the species is presumed absent.

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Long-spined spineflower	<i>Chorizanthe polygonoides</i> var. <i>longispina</i>	Fed: -- State: -- CNPS: 1B.2	An annual herb inhabiting meadows within chaparral, valley grasslands, and coastal sage scrub habitats. Flowers April-July (100-4,920 feet).	A	Presumed Absent: The Project area lacks suitable chaparral, and open meadow habitat. A small portion of the BSA contains CSS communities; however, this habitat type is outside of the PIA and no effects to CSS would occur. Additionally, there are no CNDDDB occurrences of the species within 10 miles of the Project area. Due to the lack of suitable habitat and nearby occurrences, the species is presumed absent.
Los Angeles sunflower	<i>Helianthus nuttallii</i> ssp. <i>parishii</i>	Fed: -- State: -- CNPS: 1A	A perennial rhizomatous herb inhabiting damp meadows, marshes, and swamps, of both coastal salt and freshwater. Flowers August-October (30-5,500 feet). Species is presumed extinct in California by CNPS.	A	Presumed Absent: The species is presumed extinct in California by CNPS. There are no CNDDDB occurrences of the species within 10 miles of the Project area. Furthermore, the BSA lacks suitable marsh habitat for the species. Due to the species' likely extinction and lack of habitat, it is presumed absent.
Malibu baccharis	<i>Baccharis malibuensis</i>	Fed: -- State: -- CNPS: 1B.1	A perennial deciduous shrub inhabiting chaparral, cismontane woodland, coastal scrub, and riparian woodland communities. Flowers in August (500-1,000 feet).	HP	Presumed Absent: The BSA contains potentially suitable riparian woodland habitat; however, the BSA is outside of the species known elevation range. The nearest CNDDDB occurrence of the species is approximately 6.5 miles north of the Project area (2008). All other occurrences of the species are concentrated around this occurrence. Despite potentially suitable habitat, the species is presumed absent from the BSA due to the elevation of the BSA and the species' previous pattern of occurrence.
Many-stemmed dudleya	<i>Dudleya multicaulis</i>	Fed: -- State: -- CNPS: 1B.2	A perennial herb often found within clay and heavy soils of chaparral, coastal scrub, valley and foothill grassland communities. Flowers April-July (50-2,600 feet).	A	Presumed Absent: The Project area lacks clay soils, and coastal scrub habitat. The nearest CNDDDB occurrence of the species is approximately 1.8 miles northwest of the Project area (2005). Due to the lack of suitable habitat, the species is presumed absent.

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Mesa horkelia	<i>Horkelia cuneata</i> <i>var. puberula</i>	Fed: -- State: -- CNPS: 1B.1	A perennial herb inhabiting dry sandy or gravelly substrate, coastal chaparral, cismontane woodlands, and coastal scrub. Flowers February-September (230-2,600 feet).	A	Presumed Absent: The Project area lacks coastal habitats and the nearest CNDDDB occurrence of the species is approximately 9.7 miles northwest of the Project area (2008). Due to the lack of suitable habitat and nearby occurrences, the species is presumed absent.
Mud nama	<i>Nama stenocarpa</i>	Fed: -- State: -- CNPS: 2B.2	An annual or perennial herb inhabiting intermittently wet areas including marshes, swamps, lake margins, and river banks. Flowers January-July (15-1,640 feet).	HP	Presumed Absent: The BSA does not contain marsh, swamp, lake or river habitat suitable for the species. There are no recent (<20 years) CNDDDB occurrences of the species within 10 miles of the BSA. Due to the lack of suitable habitat and lack of recent local occurrences.
Munz's onion	<i>Allium munzii</i>	Fed: -- State: -- CNPS: 1B.1	A perennial herb inhabiting mesic and clay soils and grassy openings in coastal sage scrub; chaparral, cismontane woodland, coastal scrub, pinyon and juniper woodland, and valley and foothill grassland. Flowers April-May (980-2,950 feet).	A	Presumed Absent: The BSA lacks clay soils and coastal habitats. A small portion of the BSA contains CSS communities; however, this habitat type is outside of the PIA and no effects to CSS would occur. In addition, there are no CNDDDB occurrences of the species within 10 miles of the Project area. Due to the lack of suitable soils and the lack of recent occurrences, the species is presumed absent.
Salt spring checkerbloom	<i>Sidalcea neomexicana</i>	Fed: -- State: -- CNPS: 2B.2	A perennial herb inhabiting alkaline, mesic soils within alkaline springs, marshes, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas. Blooms March-June (50-5,020 feet).	A	Presumed Absent: The BSA lacks alkaline, mesic soils and alkaline spring, marsh, and coastal habitats. Additionally, there is only one nearby CNDDDB occurrence of the species, which is approximately 6.4 miles southeast of the Project area (date unspecified). Due to the lack of suitable habitat, the species is presumed absent.
San Bernardino aster	<i>Symphotrichum defoliatum</i>	Fed: -- State: -- CNPS: 1B.2	A perennial rhizomatous herb inhabiting near ditches, streams, and springs of cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seep, marsh and swamp, and vernally mesic valley and	A	Presumed Absent: The BSA lacks meadow, marsh, and vernal pool habitats. In addition, there are no CNDDDB occurrences of the species within 10 miles of the Project area. Due to the lack of habitat and the lack

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
			foothill grassland communities. Flowers July-November (0-6,700 feet).		of recent, nearby occurrences, the species is presumed absent.
San Fernando Valley spineflower	<i>Chorizanthe parryi</i> var. <i>fernandina</i>	Fed: C State: E CNPS: 1B.1	An annual herb inhabiting sandy places, generally in coastal or desert scrub communities, but may also occur within valley and foothill grassland. Flowers April-July (500-4,000 feet).	A	Presumed Absent: The BSA lacks coastal and desert scrub communities. In addition, the species is possibly extirpated from the only nearby historic (1902) CNDDDB occurrence, which is 6.1 miles northwest of the Project area. Due to the lack of suitable habitat and the lack of recent confirmed occurrences, the species is presumed absent.
San Miguel savory	<i>Clinopodium chandleri</i>	Fed: -- State: -- CNPS: 1B.2	A perennial shrub inhabiting rocky, gabbroic or metavolcanic soils of chaparral, cismontane woodland, coastal scrub, riparian woodland, and valley and grassland communities. Flowers March-July (400-3,600 feet).	A	Presumed Absent: The BSA lacks rocky, gabbroic, and metavolcanic soils. In addition, the only nearby CNDDDB occurrence of the species is approximately 6.4 miles southeast of the Project area (date unspecified). Due to the lack of suitable soils, and lack of recent known occurrences, the species is presumed absent.
Santa Ana River woollystar	<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	Fed: E State: E CNPS: 1B.1	A perennial herb inhabiting river floodplains or terraced fluvial deposits within chaparral and coastal scrub communities. Flowers May-September (300-2,000 feet).	A	Presumed Absent: The Project area lacks chaparral and coastal scrub communities. Additionally, there are no CNDDDB occurrences of the species within 10 miles of the Project area. Due to the lack of habitat within the Project area and the lack of nearby occurrences, the species is presumed absent.
Santa Monica dudleya	<i>Dudleya cymose</i> ssp. <i>ovatifolia</i>	Fed: -- State: -- CNPS: 1B.1	A perennial herb inhabiting volcanic, sedimentary, and rocky soils in chaparral and coastal sage scrub habitat in the Santa Monica Mountains. Flowers May-June (500-5,500 feet).	A	Presumed Absent: The BSA is not located within the Santa Monica Mountains; therefore, there are no CNDDDB occurrences of the species within 10 miles of the Project area. Additionally, the Project area lacks chaparral and sage scrub habitat. Due to the lack of habitat and nearby occurrences, the species is presumed absent.

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
Santiago Peak phacelia	<i>Phacelia keckii</i>	Fed: -- State: -- CNPS: 1B.3	An annual herb endemic to California, inhabiting open chaparral and closed-cone pine forest. Flowers May-June (1,640-5,250 feet).	A	Presumed Absent: The BSA does not contain suitable open chaparral or closed-cone pine forest for the species. The nearest CNDDDB occurrence of the species is approximately 3.7 miles east of the Project area (2009). Additionally, the BSA is outside the species known elevation range. Due to the elevation of the BSA, the species is presumed absent.
Slender-horned spineflower	<i>Dodecahema leptoceras</i>	Fed: -- State: -- CNPS: 1B.1	An annual herb inhabiting alluvial sand in coastal scrub, chaparral, and cismontane woodland communities. Flowers April-June (660-2,500 feet).	A	Presumed Absent: There are no CNDDDB occurrences of the species within 10 miles of the Project area. Additionally, the Project area lacks specific communities inhabited by the species. Due to the lack of suitable habitat, the species is presumed absent.
Smooth tarplant	<i>Centromadia pungens</i> ssp. <i>laevis</i>	Fed: -- State: -- CNPS: 1B.1	An annual herb inhabiting alkaline soils of open, chenopod scrub, meadows and seeps, playas, riparian woodland, and valley and foothill grassland communities. Flowers April-September (0-2,100 feet).	A	Presumed Absent: The BSA contains riparian woodland habitat but lacks open meadow, seep, or chenopod scrub habitats. In addition, there are no CNDDDB occurrences of the species within 10 miles of the Project area. Due to the lack of suitable habitat and nearby occurrences, the species is presumed absent.
South coast saltscale	<i>Atriplex pacifica</i>	Fed: -- State: -- CNPS: 1B.2	An annual herb inhabiting coastal bluff scrub, coastal dunes, coastal scrub, and playa communities. Flowers March-October (0-460 feet).	A	Presumed Absent: The BSA lacks coastal communities and there are no CNDDDB occurrences of the species within 10 miles of the Project area. Additionally, the BSA is located outside the species' known elevation range. Due to the lack of suitable habitat and the elevation of the BSA, the species is presumed absent.
Southern tarplant	<i>Centromadia parryi</i> ssp. <i>australis</i>	Fed: -- State: -- CNPS: 1B.1	An annual herb inhabiting mesic vernal pools in margins of marshes, swamps, valley grassland, and foothill grassland communities. Flowers May-November (0-1,575 feet).	A	Presumed Absent: The BSA lacks vernal pools and marsh habitat. In addition, the species is possibly extirpated from the nearest historic (1997) CNDDDB occurrence, which is approximately 9.2 miles west of the Project area. All recent CNDDDB occurrences are over 10 miles away from

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
					the Project area. Due to the lack of suitable habitat and nearby occurrences, the species is presumed absent.
Summer holly	<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	Fed: -- State: -- CNPS: 1B.2	A perennial evergreen shrub inhabiting chaparral and cismontane woodland communities. Flowers April-June (100-2,600 feet).	A	Presumed Absent: The Project area lacks suitable chaparral and cismontane woodland habitat for the species. The only nearby CNDDDB occurrence of the species is approximately 2.7 miles southeast of the Project area (2013). Despite nearby occurrences, the species is presumed absent due to the lack of suitable habitat.
Tecate cypress	<i>Hesperocyparis forbesii</i>	Fed: -- State: -- CNPS: 1B.1	A perennial evergreen tree native to California, inhabiting clay, gabbroic, or metavolcanic soils in chaparral and closed-cone pine forest communities (260-4,900 feet).	A	Presumed Absent: The BSA lacks clay, gabbroic, and metavolcanic soils and chaparral or closed-cone pine forest habitat. Additionally, the nearest recent CNDDDB occurrence of the species is approximately 6.7 miles east of the Project area (2006). Due to the lack of suitable soils, the species is presumed absent.
Thread-leaved brodiaea	<i>Brodiaea filifolia</i>	Fed: T State: E CNPS: 1B.1	A perennial bulbiferous herb inhabiting clay soils within grassland, vernal pools, chaparral openings, cismontane woodland, coastal scrub, playas, and valley and foothill grassland communities. Flowers March-June (80-4,000 feet).	A	Presumed Absent: The BSA lacks clay soils, vernal pools, and coastal habitats. The only nearby historic (1998) CNDDDB occurrence of the species is approximately 2.5 miles south of the Project area. Due to the lack of habitat and recent local occurrences, the species is presumed absent.
Vernal barley	<i>Hordeum intercedens</i>	Fed: -- State: -- CNPS: 3.2	An annual grass native to California and Baja California, inhabiting saline flats and depressions in foothill grassland, valley grassland, coastal dune, coastal scrub, vernal pool, freshwater wetland, and wetland-riparian habitats. Flowers March-June (15-3,300 feet).	A	Presumed Absent: The BSA lacks saline flats, coastal dunes, wetland, and coastal scrub communities. In addition, there are no CNDDDB occurrences of the species within 10 miles of the Project area. Due to the lack of suitable habitat and nearby occurrences, the species is presumed absent.

Common Name	Species Name	Status	General Habitat Description	Habitat Present	Potential for Occurrence and Rationale
White rabbit-tobacco	<i>Pseudognaphalium leucocephalum</i>	Fed: -- State: -- CNPS: 2B.2	A perennial herb inhabiting dry, sandy creek bottoms of chaparral, cismontane woodland, coastal scrub, and riparian woodland communities. Flowers July-December (0-6,900 feet).	A	Presumed Absent: The BSA contains potentially suitable riparian woodland habitat, however, the stream habitat would not provide the dry, sandy creek conditions that the species requires. The only nearby CNDDDB occurrence of the species is approximately 7.2 miles northwest of the Project area (2008). Due to the lack of dry, sandy creek bottoms required by the species, and lack of recent local occurrences, the species is presumed absent from the BSA.
White-bracted spineflower	<i>Chorizanthe xanti</i> var. <i>leucotheca</i>	Fed: -- State: -- CNPS: 1B.2	An annual herb inhabiting sandy or gravelly soils within coastal scrubs, alluvial fans, Mojavean desert scrub, and pinyon/juniper woodland communities. Blooms April-June (980-3,940 feet).	A	Presumed Absent: The BSA does not contain coastal scrub, alluvial fans, or pinyon/juniper woodland habitat suitable for the species. There are no CNDDDB occurrences of the species within 10 miles of the Project area. Due to the lack of suitable habitat and occurrences, the species is presumed absent.

<p>Federal Designations (Fed): (FESA, USFWS) E: Federally listed, endangered T: Federally listed, threatened D: Federally listed, delisted</p>	<p>State Designations (CA): (CESA, CDFW) E: State-listed, endangered T: State-listed, threatened D: State-listed, delisted</p>
<p>Other Designations CDFW_SSC: CDFW Species of Special Concern CDFW_FP: CDFW Fully Protected</p> <p>California Native Plant Society (CNPS) Designations: <i>*Note: according to CNPS (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10 of the California Fish and Game Code. This interpretation is inconsistent with other definitions.</i> 1A: Plants presumed extinct in California. 1B: Plants rare and endangered in California and throughout their range. 2: Plants rare, threatened, or endangered in California but more common elsewhere in their range. 3: Plants about which need more information; a review list.</p> <p>Plants 1B, 2, and 4 extension meanings: _1 Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat) _2 Fairly endangered in California (20-80% occurrences threatened) _3 Not very endangered in California (<20% of occurrences threatened or no current threats known)</p>	
<p>Habitat Potential Absent [A] - No habitat present and no further work needed. Habitat Present [HP] - Habitat is, or may be present. The species may be present. Critical Habitat [CH] – Project is within designated Critical Habitat.</p>	
<p>Potential for Occurrence Criteria: Present: Species was observed on site during a site visit or focused survey. High: Habitat (including soils and elevation factors) for the species occurs on site and a known occurrence has been recorded within 5 miles of the site. Low-Moderate: Either low quality habitat (including soils and elevation factors) for the species occurs on site and a known occurrence exists within 5 miles of the site; or suitable habitat strongly associated with the species occurs on site, but no records were found within the database search. Presumed Absent: Focused surveys were conducted, and the species was not found, or species was found within the database search but habitat (including soils and elevation factors) do not exist on site, or the known geographic range of the species does not include the survey area.</p>	
<p>Source: CDFW 2021, CNDDDB 2021, CNPS 2021, Calflora 2020, Jepson 2020, NMFS 2021; USFWS 2021, iNaturalist 2020; ebird 2020</p>	

Appendix F: FIRM map

National Flood Hazard Layer FIRMette

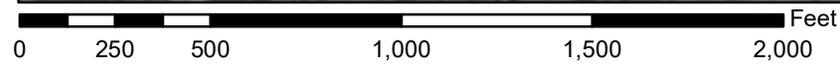


Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- | | | |
|-----------------------------|--|---|
| SPECIAL FLOOD HAZARD AREAS | | Without Base Flood Elevation (BFE)
Zone A, V, A99 |
| | | With BFE or Depth Zone AE, AO, AH, VE, AR |
| | | Regulatory Floodway |
| OTHER AREAS OF FLOOD HAZARD | | 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X |
| | | Future Conditions 1% Annual Chance Flood Hazard Zone X |
| | | Area with Reduced Flood Risk due to Levee. See Notes. Zone X |
| | | Area with Flood Risk due to Levee Zone D |
| OTHER AREAS | | Area of Minimal Flood Hazard Zone X |
| | | Effective LOMRs |
| GENERAL STRUCTURES | | Area of Undetermined Flood Hazard Zone D |
| | | Channel, Culvert, or Storm Sewer |
| | | Levee, Dike, or Floodwall |
| OTHER FEATURES | | Cross Sections with 1% Annual Chance Water Surface Elevation |
| | | Coastal Transect |
| | | Base Flood Elevation Line (BFE) |
| | | Limit of Study |
| | | Jurisdiction Boundary |
| MAP PANELS | | Coastal Transect Baseline |
| | | Profile Baseline |
| | | Hydrographic Feature |
| | | Digital Data Available |
| | | No Digital Data Available |
| | | Unmapped |
- The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

33°42'49.71"N



USGS The National Map: Orthoimagery. Data refreshed April, 2019.

1:6,000 33°42'19.77"N

117°37'14.58"W

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/24/2020 at 5:14:05 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Appendix G: Hazardous Waste Initial Site Assessment

Modjeska Canyon Road Bridge (No. 55C-0172) Replacement Project
Orange County, California
Orange County Public Works
Federal Aid Project No. BRL0-5955 (094)

Initial Site Assessment



Prepared for:



Prepared by:



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Modjeska Canyon Road Bridge (No. 55C-0172) Replacement Project
Orange County, California
Orange County Public Works
Federal Aid Project No. BRL0-5955 (094)

Initial Site Assessment

Submitted to:
Orange County Public Works

This report has been prepared by or under the supervision of the following Professional Geologist. The Registered Professional Geologist attests to the technical information contained herein and has judged the qualifications of any technical specialists providing environmental data upon which recommendations, conclusions, and decisions are based.



Melissa McAssey
Professional Geologist #8132

4/1/2021

Date

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Executive Summary

The Modjeska Canyon Road Bridge No. 55C-0172 Replacement Project (Project) is located on Modjeska Canyon Road in Orange County, California. The bridge spans a non-leveed, incised channel within Modjeska Canyon, known as Santiago Creek. The steel plate girder bridge was constructed in 1935 and is approximately 64-feet-long and 24.5-feet-wide. The purpose of the Project is to replace the bridge with one that meets current safety and roadway standards. The Project is located in the unincorporated community of Modjeska Canyon along Modjeska Canyon Road approximately 0.8 miles east of Santiago Canyon Road (S18), immediately south of the intersection of Santiago Canyon Road and Modjeska Grade Road. Regionally, the bridge is located between the unincorporated community of Silverado approximately 2.75 miles to the north and the City of Lake Forest about 0.75 miles to the southwest.

Orange County Public Works Department (OCPW) together with the California Department of Transportation's (Caltrans) Local Assistance Program, is proposing the replacement of the bridge for safety purposes, and to improve accessibility for pedestrians and emergency vehicles. This Project will be federally funded by the Highway Bridge Program (HBP) and local funds under Federal Aid Project No. BRL0-5955 (094).

As part of the environmental due diligence for the Project, WRECO, as a subcontractor to the Orange County Public Works, has completed an Initial Site Assessment (ISA) for the Modjeska Canyon Road Bridge No. 55C-0172 over Santiago Creek Replacement Project. The purpose of the ISA is to assess the potential risks posed by hazardous materials in the Project area to environmental resources and human health. This report presents the results of the ISA, including regulatory records searches, file reviews, historical database reviews, and a site reconnaissance along with our recommendations.

The ISA was required as part of Caltrans' *Local Assistance Procedures Manual* and *Standard Environmental Reference (SER) Environmental Handbook*, Volume 1, Chapter 10 "Guidelines for Hazardous Materials, Hazardous Waste, and Contamination." The industry standard for preparing an ISA is found in the American Society for Testing and Materials (ASTM) International E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*.

According to historical research and records, the Project area was utilized for grazing and wood land, and one property to the southwest for row crops. The Project area is still rural and has experienced little development, with the exception of agriculture to the southwest of the bridge and some residential properties. In the past 20 years, more residential homes have been constructed, however, the neighborhood has remained fairly rural.

The ISA identified the following potential recognized environmental conditions (REC) including:

- Potential polychlorinated biphenyls (PCB) and heavy metals from pole-mounted transformers on wooden utility poles (potential arsenic, chromium, creosote, and pentachlorophenol) along Markuson Road to the northeast;
- Potential aerially deposited lead (ADL) in exposed soil south of the bridge, from historical vehicle emissions during the leaded gasoline era;

- Potential lead-based paint (LBP) on the metal railings on both sides of the bridge, and the yellow traffic striping;
- Potential asbestos-containing materials (ACM) within the bridge materials; and
- Potential for pesticides and heavy metals from the agricultural field to the southwest, within soil along Santiago Creek.

WRECO recommends a Preliminary Site Investigation (PSI) to test bridge materials for ACM and LBP prior to demolition. Soils that will be disturbed around the bridge should be tested for constituents of concern, as indicated above. The RECs identified at the Project area are described in the Summary Table below.

Summary of RECs and Recommendations

Description	Evidence of REC Found	Recommended Actions
Agricultural Fields	Due to agricultural use of the land to the southwest, organochlorine pesticides (OCP), organophosphorus pesticides (OPP), and heavy metals may be present within soil in Santiago Creek.	PSI: -Soil sampling for OCP, OPP and heavy metals.
ADL	There is potential for elevated levels of lead in exposed soil from historical vehicle emissions, since leaded gasoline was used through the 1970s and the shoulders of the roadway, south of the bridge, may contain ADL.	PSI: -Soil sampling for total lead.
Utility Poles and Pole-mounted Transformers	Treated wood poles (utility poles) along the side of the road may contain a variety of chemicals (arsenic, chromium, copper, creosote, and pentachlorophenol) that can runoff and impact soil. Pole-mounted transformers located to the northeast of the bridge, may contain PCBs and metals.	PSI: -Soil sampling for PCBs, pentachlorophenol, creosote, and heavy metals. (If utility poles will be moved or replaced, abate transformers prior to construction)
Existing Bridge Structure May Contain LBP and ACM	Due to the age of the bridge, there is potential for LBP and ACM within the structure, and the potential for LBP associated with traffic striping.	PSI: -Structural elements sampling for LBP and ACM.

Acronyms

AAI	All Appropriate Inquiries
ACM	Asbestos-containing Materials
ADL	Aerially Deposited Lead
ADT	average daily traffic
APN	Assessor Parcel Number
ASTM	American Society for Testing and Materials
BBC	BBC Environmental, Inc.
Caltrans	California Department of Transportation
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERS	California Environmental Reporting System
CGS	California Geologic Survey
CIWQS	California Integrated Water Quality System
CREC	Controlled Recognized Environmental Condition
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EDR	Environmental Data Resources
EPA	Environmental Protection Agency
Ft bgs.	feet below ground surface
HBP	Highway Bridge Program
HREC	Historical Recognized Environmental Condition
ISA	Initial Site Assessment
LBP	Lead-based Paint
NAIP	National Agriculture Imagery Program
NRCS	National Resource Conservation Service
NOA	Naturally Occurring Asbestos
OCP	organochlorine pesticides
OCPW	Orange County Public Works Department
OPP	organophosphorus pesticides
PCB	Polychlorinated Biphenyl
PES	Preliminary Environmental Study
PR	Peninsula Range
Project	Modjeska Canyon Road Bridge No. 55C-0172 Replacement Project
PSI	Preliminary Site Investigation
RC	reinforced concrete
REC	Recognized Environmental Condition
S18	Santiago Canyon Road
SER	Standard Environmental Reference
SWRCB	State Water Resource Control Board
USDA	United States Department of Agriculture
USGS	United States Geological Survey

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1 INTRODUCTION

This report presents the results of an *Initial Site Assessment* (ISA) conducted by WRECO, on behalf of Orange County Public Works Department (OCPW), for the Modjeska Canyon Road Bridge No. 55C-0172 Replacement Project (Project), in Orange County (County), California. The bridge spans a non-leveed, incised channel within Modjeska Canyon, known as Santiago Creek. The Project is located in the eastern portion of Orange County, in the unincorporated community of Modjeska Canyon along Modjeska Canyon Road approximately 0.8 miles east of Santiago Canyon Road (S18), immediately south of the intersection of Santiago Canyon Road and Modjeska Grade Road. The Project Vicinity and Location Map are shown in Figure 1 and Figure 2, respectively.

The steel plate girder bridge was constructed in 1935 and is approximately 64-feet-long and 24.5-feet-wide. The purpose of the Project is to replace the bridge with one that meets current safety and roadway standards. The current bridge is constructed of a reinforced concrete (RC) deck on built up steel girders and floor beams, and RC pedestals and abutments with monolithic wingwalls at the northwestern and southeastern corners on spread footings. There are concrete curbs on both sides of the bridge, and an 8-inch steel pipe waterline attached to the west girder of the bridge.

The OCPW and the California Department of Transportation's (Caltrans) Local Assistance Program, is proposing the replacement of the bridge for safety purposes, and to improve accessibility for pedestrians and emergency vehicles. This Project will be federally funded by the Highway Bridge Program (HBP) and local funds under Federal Aid Project No. BRL0-5955 (094).

1.1 Project Description

1.1.1 Project History

Constructed in 1935, the existing Modjeska Canyon Bridge is approximately 64 feet long, a single span steel through girder bridge with transverse floor beams supporting a concrete deck. The through girders essentially work as the bridge barrier and are partially protected by a concrete parapet. The approach railing terminates prior to the bridge barriers or are non-existent, so the bridge girders/barriers are unprotected. The bridge is founded on concrete spread footings. Concrete wingwalls flare away from the bridge at all four corners. Two of these wingwalls are substantial in height and length and are also set on spread footings.

The bridge clear width between parapets is 20 feet. The north approach from Modjeska Canyon Road makes a sharp right curve onto the bridge. Markuson Road T-s into Modjeska Canyon Road from the east, just north of the bridge. The south approach curves slightly to the west immediately south of the bridge. The road approaches are approximately 24 feet wide. The concrete parapets on the bridge are too narrow to function as sidewalks and are interrupted by steel flanges.

From the intersection of E. Santiago Canyon Road and Modjeska Canyon Road to the bridge there are no speed limit signs, indicating the prima facie speed limit is 55 mph. However, the narrow road and sharp curve near the bridge greatly reduces speed. The safe speed of these curves is approximately 25 mph. The most recent County traffic count in March 2018 determined the average daily traffic (ADT) at approximately 420.

Santiago Creek flows from the east, crossing under the bridge at a shallow angle, resulting in a bridge skew of approximately 22°. The bridge was programmed for replacement based on the low sufficiency rating and Functional Obsolete classification due to the narrow deck.

1.1.2 Purpose and Need

1.1.2.1 Purpose

The purpose of the Project is to replace the existing deteriorated steel bridge with a new bridge in conformance with current environmental and design standards, both structurally and hydraulically, and have a life expectancy of 75 years minimum. Portions of the roadway connecting to the bridge will require widening and re-profiling to provide for a smooth transition to the new bridge.

1.1.2.2 Need

The road is the main access for residents of Modjeska Canyon; therefore, it is critical to keep it in service and avoid potential deficiencies that would take the bridge out of service. Seasonal floods and wildfires occur in the Santa Ana Mountains that affect this community and quick access from the Canyon is necessary during such events.

The existing 2-lane bridge is classified as functionally obsolete due to the very narrow road width. The bridge must be widened to meet current standards and traffic volumes.

The bridge live load capacity does not meet current standards. In addition, the non-redundant riveted steel through girders and riveted steel floor beams require the bridge to undergo biennial inspection per the Caltrans Fracture Critical Member Inspection Plan. Replacing the bridge will eliminate the intensive bridge inspection maintenance efforts and cost.

A new bridge structure is needed to provide a facility that will meet current federal standards and that will support an increased ADT capacity.

1.1.3 Project Description

Orange County, in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the Modjeska Bridge (Bridge No. 55C0172) over Santiago Creek. The Modjeska Bridge is located in Modjeska Canyon near the Cleveland National Forest. The existing bridge is a single span and crosses over Santiago Creek. The project will replace the existing substandard steel bridge; construction funding is provided by the Highway Bridge Program (HBP) and toll credits.

The proposed replacement structure is a 65'-2" long single span prestressed, precast concrete I girder bridge. The bridge will be raised approximately one foot to increase hydraulic conveyance. Tall abutment walls, similar to the existing condition, will be set on spread footing foundations. Tall wing walls will be required at all corners. The replacement bridge will have 12-foot-wide lanes and will include 8-foot minimum width shoulders. Bridge barriers will be deck mounted concrete barrier Type 836.

There are no nearby pedestrian facilities or future plans to place sidewalks along Modjeska Canyon Road, but portions of Modjeska Canyon Road have sufficient dirt shoulders to provide room for

pedestrians. To keep with the rural setting, there will not be sidewalks on the bridge. The bridge is on a 155' horizontal curve. The precast girder construction limits the radius the outside edge of the bridge can be curved. Therefore, the shoulders will vary from 8 feet up to 10.8 feet, for a minimum total barrier to barrier width of 43'-10". The bridge will be wider at the north end to accommodate vehicles turning off the bridge onto Markuson Road to the east.

Santiago Creek is an ephemeral stream that flows west under the existing bridge. The location of the stream is well defined and is currently not adjacent to the abutments during low flows. Construction will likely occur when the stream is dry and not require stream diversion. A drainage ditch runs along the southwest approach. The wider bridge may require the ditch to be realigned, and trees at bridge corners will need to be removed. The ditch will be moved slightly west in the immediate vicinity of the bridge and will quickly transition back to its current location south of the bridge.

The narrow road and limited right of way requires the replacement structure be placed in the same location as the existing structure. There is a detour approximately 4 miles in length but includes a steep winding road on Modjeska Grade Road. Because of the steep, winding nature of the Modjeska Grade detour and the desire to provide suitable emergency ingress and egress, the new bridge will be stage constructed to allow one lane of alternating traffic during construction. The alternating one-way traffic will be controlled by signal.

During the first stage, a temporary bridge approximately 80 feet long will be placed within the footprint of the new bridge, reducing environmental and right of way impacts to the same as needed for only the new bridge. This will require the road to be closed to traffic for approximately 2 days while the existing bridge is removed and the temporary bridge is erected. Modjeska Grade Road will be utilized for traffic during this short road closure. For the second construction stage, one lane of alternating traffic is shifted to the new bridge, the temporary bridge is removed, and the remaining half of the new bridge is constructed.

Contractor staging areas are anticipated to be situated on the closed portion of the existing road approaches and potentially on property just west of the north abutment. Temporary easements and partial parcel acquisition will be necessary, but are anticipated to be minimal. Exact amounts will be determined during final design.

Utilities include a waterline attached to the west side of the bridge and overhead electrical and communication lines just to the north of the north abutment. It is likely the overhead lines will not need to be relocated for construction. The waterline will need to be relocated to the new bridge.

Typical equipment for roadway construction would include heavy construction earthmoving equipment, dump trucks and pavers. Typical bridge construction equipment would include cranes, excavators, rock hammers, generators, and concrete pumps.

1.2 Purpose of Initial Site Assessment

WRECO was contracted and tasked by Dokken Engineering Inc. to perform an ISA in agreement with OCPW for professional services in support of the Project. The ISA was identified as a required technical study in the Preliminary Environmental Study (PES) signed on October 26, 2017 (Appendix A). The ISA is required as part of the Caltrans environmental review, consistent with Caltrans' *Local Assistance Procedures Manual* and *Standard Environmental Reference (SER) Environmental Handbook*, Volume 1, Chapter 10 "Guidelines for Hazardous Materials, Hazardous Waste, and Contamination."

The industry standard for preparing an ISA is found in the American Society of Testing and Materials (ASTM) International E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. The ISA was conducted in accordance with the United States Environmental Protection Agency (EPA) Standards and Practices for All Appropriate Inquiries (AAI) (40 CFR Part 312), which needs to be included as part of the process of evaluating a property's environmental conditions and assessing potential liability for any contamination. The intention of the ISA is to identify potential issues that may impact the Project with respect to the range of potential contaminants within the scope of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. 9601).

The ISA investigation evaluated the Project area for the presence of recognized environmental conditions (REC). The ASTM defines a REC as the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property.

The term "REC" is not intended to include *de minimis* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

Two additional types of RECs are included in the revised ASTM publication, including historical RECs (HREC) and controlled RECs (CREC). A HREC is defined by ASTM as a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or met unrestricted use criteria established by the regulatory authority without subjecting the property to any required controls.

A CREC is defined by ASTM as a REC resulting from a past release of any hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by a no further action letter or equivalent or met risk-based criteria established by the regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

No significant data gaps were identified during the completion of this ISA. Certain exceptions in this ISA, to the AAI standard, included: 1) no property appraisals performed for the Project area, and; 2) no direct interviews with the owners of the subject parcels. The permanent acquisitions and the temporary construction easements are currently pending for further actions. This report is not intended to serve as a compliance assessment of the subject property.

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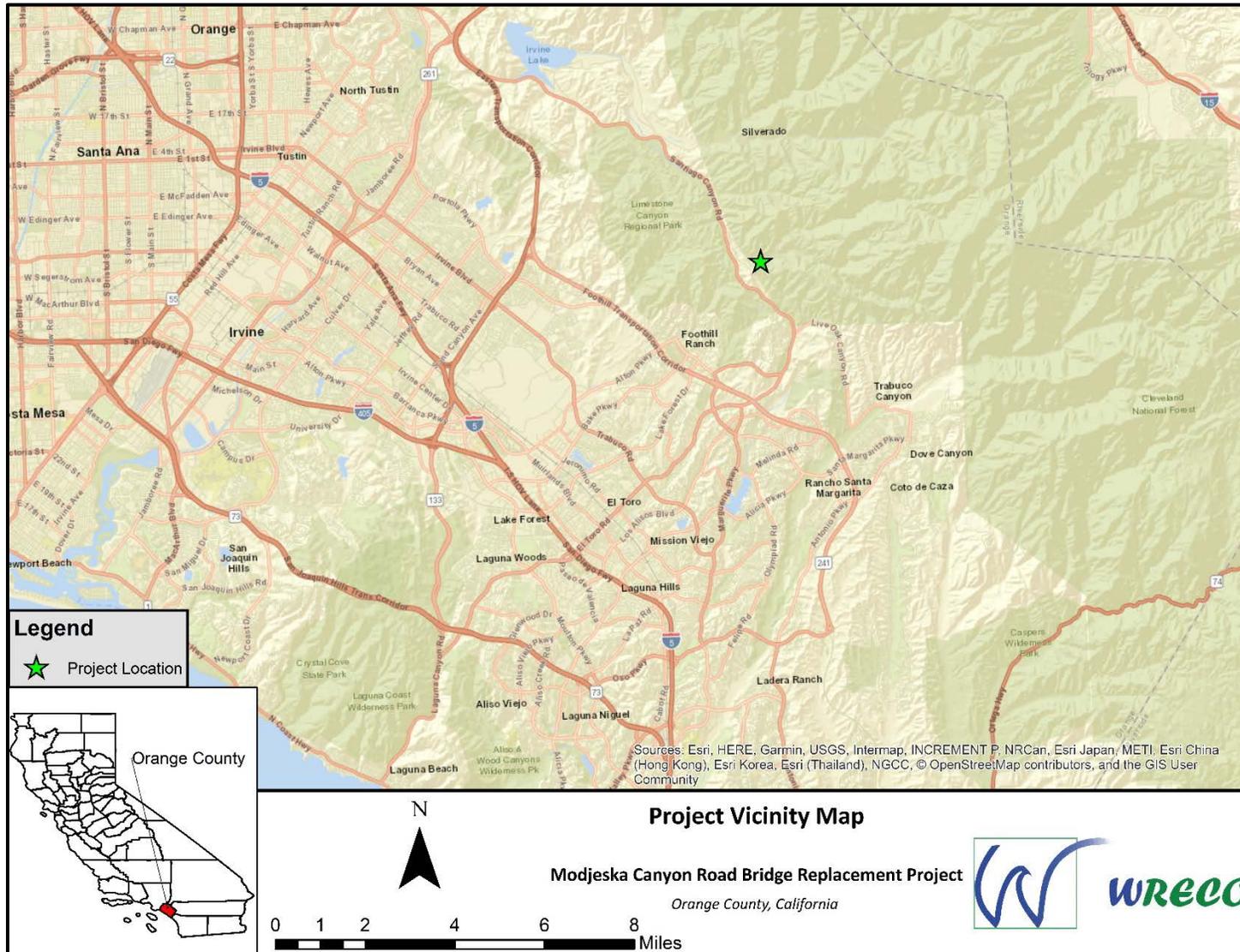


Figure 1. Project Vicinity Map

Source: WRECO and ESRI, 2019

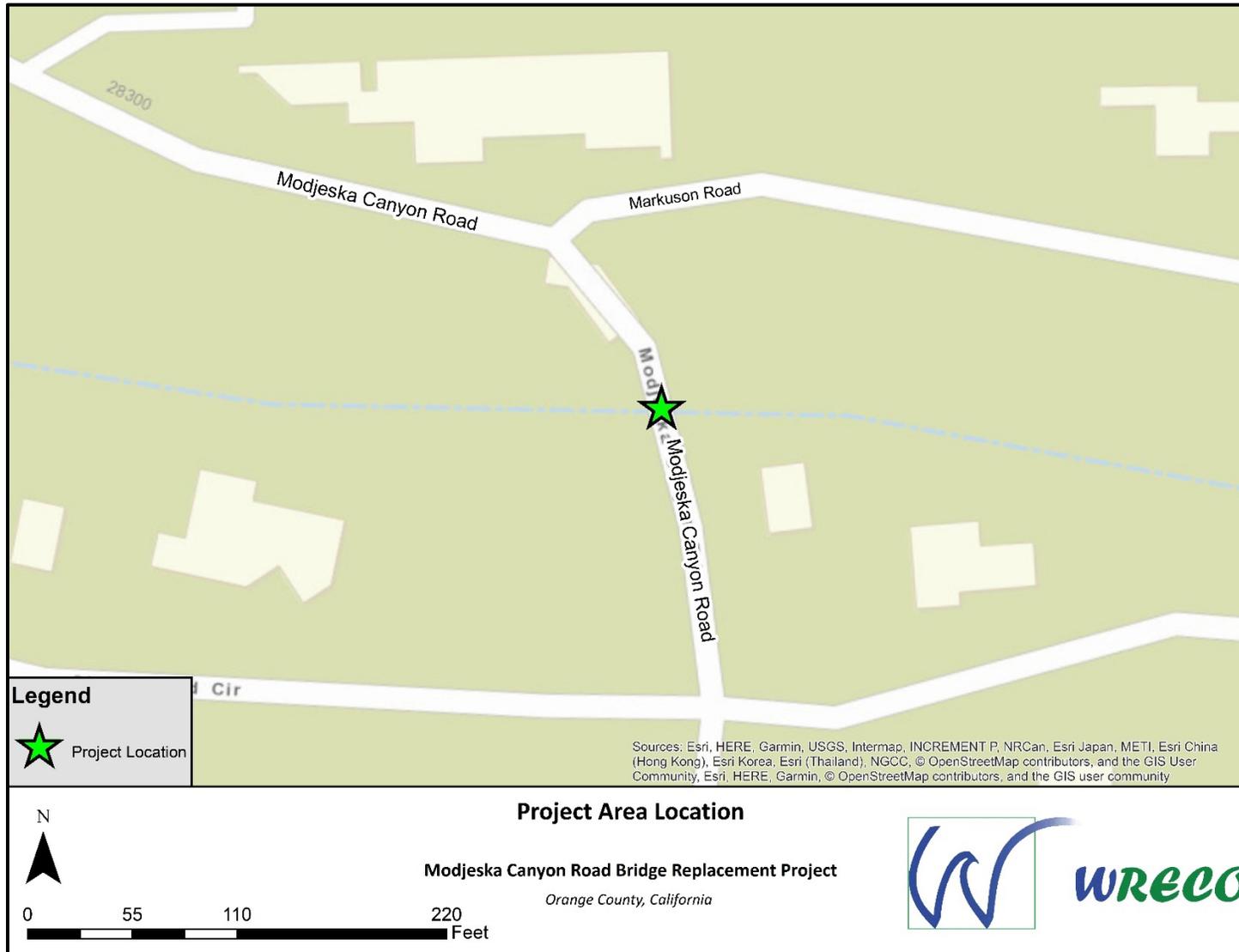


Figure 2. Project Location Map

Source: WRECO and ESRI, 2019

2 PROJECT AREA SETTING

The Modjeska Bridge is located in Modjeska Canyon near the Cleveland National Forest. The existing bridge is a single span and crosses over Santiago Creek. The Project is located in the eastern portion of Orange County, in the unincorporated community of Modjeska Canyon along Modjeska Canyon Road approximately 0.8 miles east of Santiago Canyon Road (S18), immediately south of the intersection of Santiago Canyon Road and Modjeska Grade Road. Regionally, the bridge is located between the unincorporated community of Silverado approximately 2.75 miles to the north, and the City of Lake Forest about 0.75 miles to the southwest.

2.1 Physical Setting

2.1.1 Topography

Based on the Environmental Data Resources (EDR) GeoCheck® Physical Setting Source Summary (Appendix B), the average elevation of the Project site is 1,272 feet above mean sea level. The United States Geological Survey (USGS), Black Star Canyon, California 7.5-Minute Topographic Quadrangle map was reviewed. The Project area is sloped moderately to the southwest. A copy of the EDR Historical Topographic Map Report is provided in Appendix C.

2.1.2 Regional Geology

The Project is in the Peninsular Ranges Geomorphic Province, which is a group of mountain ranges that run from southern California to the southern tip of the Baja California peninsula. This province is characterized by a series of ranges separated by longitudinal valleys, trending northwest to southeast, subparallel to faults branching from the San Andreas Fault. The trend of topography is similar to the Coast Ranges, but the geology is similar to that of the Sierra Nevada with granitic rock intruding the older metamorphic rocks. The Peninsular Ranges (PR) extend into lower California and are bound on the east by the Colorado Desert Geomorphic Province and the Transverse Ranges to the north. The Los Angeles Basin and the island group (Santa Catalina, Santa Barbara, and the distinctly terraced San Clemente and San Nicolas islands), together with the surrounding continental shelf (cut by deep submarine fault troughs), are included in this province (CGS, 2002).

The PR is comprised of the Santa Ana, San Jacinto, and Laguna Ranges mountains, that contain metamorphosed oceanic rock (marble and schist) and metasedimentary rocks (sandstone and shale). The PR batholith is part of a chain of Mesozoic granitic rock that extends along western North America that formed from subduction of the Pacific plate (oceanic) beneath the continental plate, around 100 million years ago. The rocks in the western region contain mafic igneous rocks (basalt gabbro and andesite) and are older than the eastern region, which contains felsic igneous rocks (granite and granodiorite) and is younger. Saddleback Mountain, is the landmark formed by the two highest peaks in the Santa Ana Mountains and the ridge between them. Resembling a saddle, this formation dominates the County's eastern skyline, and Santiago Peak (5,689 feet) and Modjeska Peak (5,496 feet) are the highest points in the County. The hilly land in southern Orange County is known colloquially as Saddleback Valley.

The EDR GeoCheck® Physical Setting Source Summary (Appendix B) provided geologic information for the general area of the Project, which was identified as Stratified Sequence of the Mesozoic Era, Cretaceous System, and Upper Cretaceous Series. The Regional Geology Map is provided as Figure 3.

2.1.3 Local Geology and Soils

The Project site is located within marine sedimentary and metasedimentary rocks, described as Upper Cretaceous sandstone, shale, and conglomerate (Ku). The subsurface conditions encountered at the Project site consisted of a mixture of coarse-grained soils, sands, and mostly silty clay from the Riverwash, Cieneba and Sorrento series. These soils extended approximately 6 feet below the ground surface (EDR, 2020).

The EDR GeoCheck® Physical Setting Source Summary Report provided information on three dominant soil compositions in the general vicinity of the Project: the Riverwash, Cieneba, and the Sorrento Series.

- The Riverwash soils do not belong to any particular soil series. Instead, these soils form fans and are a composition of sandy and gravelly alluvium. These soils have negligible runoff and a very low water storage capacity, which results in frequent flooding. These soils have a slope from 0 to 5 percent. Riverwash soils line the Santiago Creek that flows under the Modjeska Canyon Road bridge.
- The Cieneba Series consists of very shallow and shallow, somewhat excessively drained soils that formed in material weathered from granitic rock. The Cieneba Series has low to high runoff with moderately rapid permeability in the soil and much slower permeability in the weathered bedrock. This series is considered extensive. It occurs throughout the coastal mountain ranges in Central and Southern California and in the foothills of the Sierra Nevada. Cieneba soils are often found on hills and mountains and have slopes ranging from 9 to 85 percent.
- The Sorrento Series is characterized by very deep, well-drained soils that formed in alluvium primarily from sedimentary rocks. This series has negligible to medium runoff with moderate to moderately slow permeability depending upon the dominant texture in the lower part of the profile. This soil series is considered extensive and occurs mostly in the valleys of the southern half of the Coast Range in California. The Sorrento Series is often on alluvial fans and stabilized floodplains. These soils typically have a slope ranging from 0 to 15 percent (NRCS, 2020).

2.1.4 Naturally Occurring Asbestos

Naturally occurring asbestos (NOA) can occur in serpentine rock and its parent material, ultramafic rock. These rock types are abundant in the Sierra foothills. The most common forms of naturally occurring fibrous minerals with NOA are chrysotile, actinolite, and tremolite. NOA has not been identified in Orange County. A review of the *General Location Guide for Ultramafic Rocks in California – Areas Likely to Contain Naturally Occurring Asbestos* (CGS, 2000) indicated NOA has not been mapped in the vicinity of the Project area.

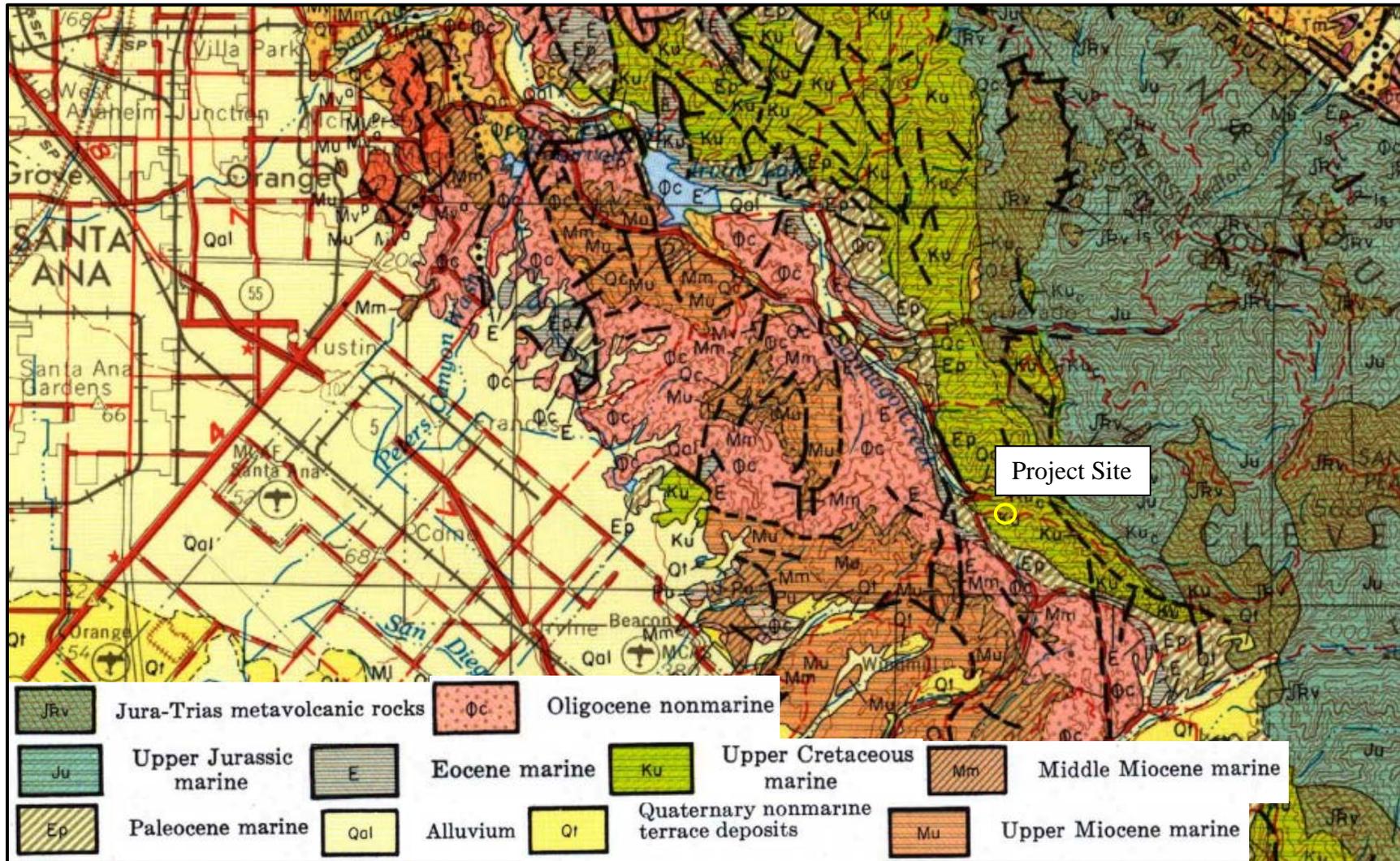


Figure 3. Regional Geology Map

Source: CGS, 2019

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2.1.5 Groundwater Hydrology

The Project area is not located in any defined basin or subbasin according to the Department of Water Resources (DWR). The Project site is bounded by the Coastal Plain of Orange County (8-001) basin on the west, and the Elsinore-Bedford Coldwater subbasin (8-004.02) to the east (DWR, 2020). Much of the water within the Project area is derived from surface water or channeled from other areas.

Based on a review of GeoTracker, the closest site near the Project area is the USA Station #824 (26731 Portola) in Lake Forest, which is approximately 2.5 miles southwest of the Project site. Boring logs from the site indicated depth to groundwater during drilling ranged from 34 feet below ground surface (ft bgs). Monitoring well information indicated depth to groundwater in the wells ranged from 9-19 ft bgs, and flow direction was to the southeast (Montrose Environmental, 2019). The EDR report with the GeoCheck® Physical Setting Source Summary did not identify any state well within a 1-mile radius of the Project site.

2.1.6 Surface Water Hydrology

The Project site is located within the Santa Ana River - Lower Santa Ana River - Santiago Watershed (801.12). The Santa Ana River is the largest watershed drainage south of the Sierra and is located largely in a highly urbanized and regulated setting. The watershed is approximately 100-miles-long and has more than 50 tributary rivers and creeks. The Santa Ana watershed spans parts of San Bernardino, Riverside, and Orange counties, draining approximately 2,840 square miles (Water Education Foundation, 2020).

The river is divided geographically into upper and lower watersheds that are delineated by the 60-year-old Prado Dam, which is a flood-controlled facility located where the river cuts through the Santa Ana Mountains section of the Coast Ranges (Water Education Foundation, 2020).

The Santa Ana watershed drains the Santa Ana River that begins in San Bernardino County and flows west into the Pacific Ocean. The largest tributary rivers include Lytle, Temescal, and Santiago Creeks. Like multiple rivers in this area, the Santa Ana River's stream bed is lined with concrete. Much of the area relies on the Santa Ana River and its tributaries due to the climate in Southern California (Water Education Foundation, 2020).

2.1.7 Current Land Use

The Project area is located in a rural setting surrounded by residential homes on large parcels of undeveloped land. The Project site is located in the eastern central part of Orange County. The proposed bridge replacement staging areas are located to the northwest and southwest of the bridge with corresponding Assessor Parcel Numbers (APN) 105-221-09 and 105-221-26, respectively. The Parcel Map is shown in Figure 4. Project Area Parcel Map.

The Project area is surrounded by residential and undeveloped natural properties:

- To the northwest of the bridge is a property with no address and APN 105-221-09;
- To the north of the bridge is a residential property located at 28331 Modjeska Canyon Road with APN 867-011-02;

- To the northeast of the bridge are two residential properties located at 28401 and 28452 Markuson Road with corresponding APNs 867-011-28 and 867-011-32, respectively;
- To the east-southeast of the bridge is a residential located at 28371 Modjeska Canyon Road with APN 105-221-10, and an adjoining property with no address and APN 867-011-08;
- To the south of the bridge is a residential property located at 28352 Modjeska Road with APN 105-222-06;
- To the southwest of the bridge is a residential property located at 28342 Shadowland Circle with APN 105-221-18; and
- To the west of the bridge are two residential properties located at 28332 and 28222 Shadowland Circle with corresponding APNs 105-221-26 and 105-221-27, respectively.

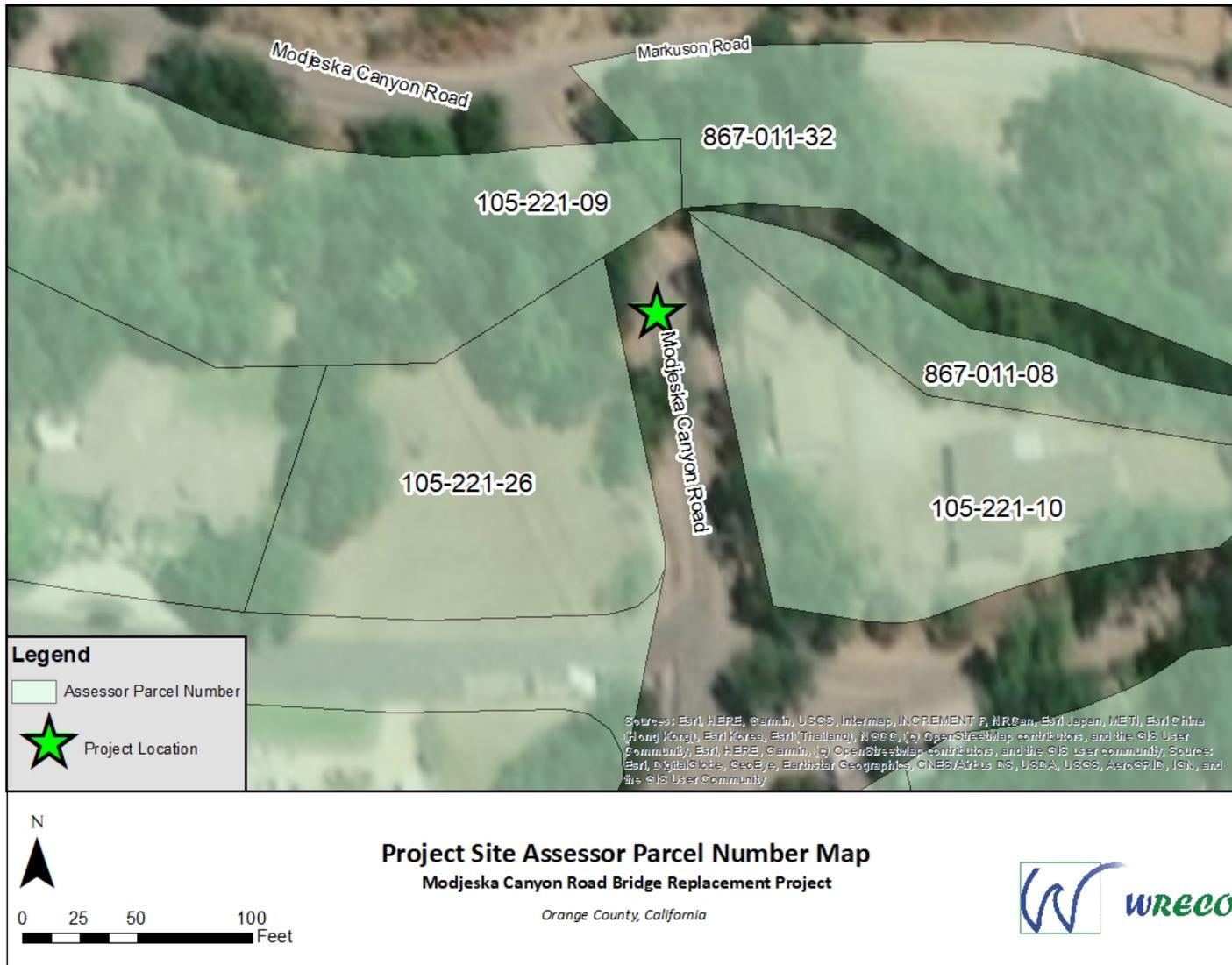


Figure 4. Project Area Parcel Map

Source: WRECO/ESRI

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3 INITIAL SITE ASSESSMENT

WRECO reviewed the California State Water Resources Control Board’s (SWRCB) GeoTracker database, the Department of Toxic Substances Control’s (DTSC) EnviroStor database, and the EDR databases and historic maps for information relevant to the potential presence of pollution in the Project area. WRECO also performed a field reconnaissance to evaluate the existing conditions in and near the Project area.

3.1 Records Review

3.1.1 State Water Quality Control Board GeoTracker Database

GeoTracker is the SWRCB’s data management system for sites that impact groundwater or have the potential to impact groundwater. GeoTracker’s online database contains sites that require groundwater cleanup as well as permitted facilities that could impact groundwater.

A review of the online GeoTracker database listed one record for individual locations within a 1-mile radius of the Project area that coincide with some of the sites identified in the EDR database. According to the SWRCB, there are no known hazardous materials or hazardous waste sites in proximity to the Project area. The GeoTracker sites within 1-mile of the Project area are delineated in Figure 5.

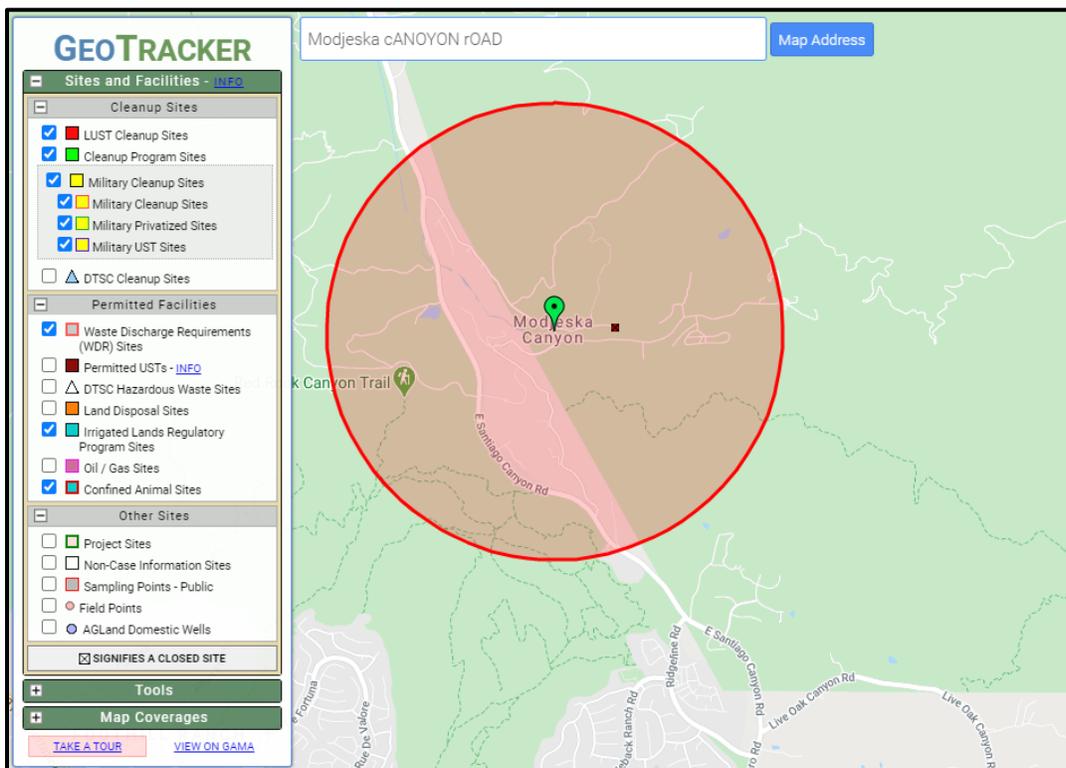


Figure 5. GeoTracker Sites within 1-mile of the Project Area

3.1.2 Department of Toxic Substances Control EnviroStor Database

The DTSC's EnviroStor database is an online search and Geographic Information System tool for identifying sites that have known contamination or sites that may require further investigation. It also identifies facilities that are authorized to treat, store, dispose, or transfer hazardous waste.

No sites were listed in the online EnviroStor database within 1-mile of the Project area, as shown in Figure 6.

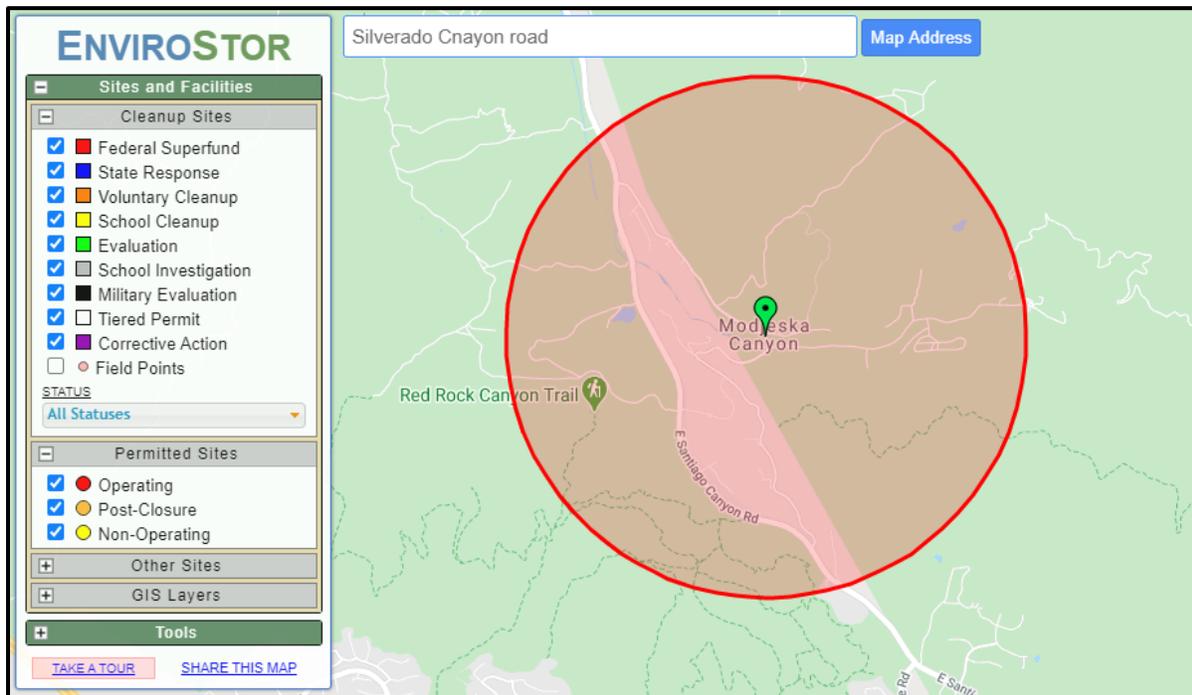


Figure 6. EnviroStor Sites within 1-mile of the Project Area

3.2 EDR Database Record Review

3.2.1 Radius Report™ with GeoCheck®

In accordance with ASTM Standard E1527-13 and part of the ISA, a computerized radius search of pertinent federal, state, and tribal environmental record databases was performed by EDR of Shelton, Connecticut. The database search was conducted to identify environmental regulatory records associated with the Project area and nearby properties that would indicate environmental conditions (e.g. reported releases of hazardous substances and/or petroleum products), which may have the potential to adversely impact the Project area and surrounding vicinity.

Database listings were reviewed for properties located within a 1-mile radius of the Project area. Database search results produced by EDR were reviewed in conjunction with other records reviewed during this ISA. The Project area (Target Property) was not listed in any of the federal, state, and local databases searched by EDR. Properties located near the Project area that were identified in one or more of the databases searched are discussed below in Table 1.

Table 1. Database Findings Summary – Sites Identified

Regulatory Database	Search Distance	Target Property	<1/8	1/8 – 1/4	1/4 – 1/2	1/2- 1	>1	Total Plotted
CIWQS	1 Mile	0	1	NR	NR	NR	NR	1
CERS	1 Mile	0	1	NR	NR	NR	NR	1
Total			2	0	0	0	0	1

NOTE: TP = Target Property; NR = Not Requested at this Search Distance

Multiple federal and state agency database listings were identified within the ASTM-specified search distances from the Project area. A total of two sites were plotted in the EDR Database, with two sites located within a 0.125-mile radius from the Project area. A release resulting from activities at nearby properties can sometimes impact the surrounding properties. Regulatory records concerning nearby properties are reviewed in order to identify a release of hazardous materials which would be expected to impact conditions in the Project area.

To evaluate whether a database address listing represents a REC with respect to the Project area, the following criteria was applied for this ISA:

- The listing must indicate that a hazardous substance release (or spill or discharge) has occurred or is likely to have occurred. In the absence of a release to the environment, it is unlikely that an address listing represents a REC with respect to the Project area.
- The Project area must be located downgradient to the listed address. Local groundwater flow direction is likely to the southeast based on local topography and nearby groundwater information. An address with a known or suspected release must be upgradient and therefore, generally to the northwest of the Project area in order to represent a REC with respect to the Project area. A listed address that is cross- or downgradient with respect to the Project area is unlikely to represent a REC for the Project area.
- A known or suspected release at an off-site location must have affected or must have the potential to affect groundwater flowing toward the Project area.

3.2.2 Project Area

The search identified three properties within a 1-mile radius of the Project area that were listed in the GeoTracker, CIWQS (California Integrated Water Quality System), and CERS (California Environmental Reporting System) State Agency databases. The properties located to the east and north of the bridge were identified in the GeoTracker and EDR databases which are discussed in Table 2.

Table 2. Sites Identified in Regulatory Databases within One Mile of the Project Area

Property Address (Location in Relation to Project Area)	Previous Business Name	Database	Current Use	Summary/ Pollutants of Concern	Case Status	Potential Pollution Risk (low, moderate, high)
2891 Modjeska Canyon Road, Silverado, CA 92676 0.25 Miles (1361 ft) east of the Project Area	Orange County Fire Station	GeoTracker	Orange County Fire Station	Leaking underground storage site that leaked diesel fuel.	Closed as of 7/16/1999	Low
Modjeska Canyon Road, Silverado, CA 92676 0.125 Miles (660 ft) north of the Project Area	Modjeska Canyon Road Bridge	CIWQS	Modjeska Canyon Road Bridge	Historical California Integrated Water Quality System	Close as of 01/25/2010	Low
Modjeska Canyon Road, Silverado, CA 92676 0.125 Miles (660 ft) north of the Project Area	Modjeska Canyon Road Bridge	CERS	Modjeska Canyon Road Bridge	Wetland – Fill and Dredge Material from the California Environmental Reporting System.	N/A	Low

3.3 Historical Use Information

Information regarding prior uses of the Project area was collected using available historical reference sources. Information related to the historical use of this property and surrounding area was obtained from a review of aerial photographs, historical topographic maps, fire insurance maps, and city directory information provided as part of the EDR report.

3.3.1 Historical Topographic Maps

A historical map report was prepared by EDR and included a search of a collection of public and private topographic maps. Maps dated 1902 (Corona), 1935 (El Toro), 1942 (Santiago Peak), 1949 (El Toro), 1950 (El Toro), 1954 (Santiago Peak), 1968 (El Toro), 1973 (Santiago Peak), 1978 (El Toro), 1981 (El Toro), 1982 (El Toro and Santiago Peak), 1988 (Santiago Peak), 1997 (Santiago Peak and El Toro), and 2012 (Santiago Peak and Lake Forest) were provided for review by EDR. The EDR Historical Topographic Map Report is included as Appendix C, and the summary of the topographic map review is provided in Table 3.

Table 3. Historical Topographic Map Summary

Year	Project Area Use Description/Significant Changes
1902	The area appears rural with only four roads throughout the mapped area.
1935, 1942	Additional roads have been constructed throughout the mapped area, especially to the south. Many structures are constructed along Modjeska Canyon Road and Markuson Road. Approximately 1/3 of the area (1935 map) is unmapped.
1949	The map appears similar to the previous map, however, approximately 1/3 of the area is unmapped.
1950, 1954	The map appears similar to the previous map with additional structures and roads that connect to small residential neighborhoods.
1968, 1973	Additional structures are visible along the roads and in the residential areas. Santiago Canyon Road (S18) has been built to the east of the Project site.
1978	The map appears similar to the previous map with additional structures along Modjeska Canyon road to the west of the Project site; however, approximately one-third of the area is unmapped.
1981	The map appears similar to the previous map; however, in 1981, approximately 1/3 of the area is unmapped; in 1982, additional structures and roads near Santiago Canyon Road (S18) north of the bridge; and in 1988, approximately 2/3 of the area is unmapped and not visible including the bridge.
1997, 2012	The map appears similar to the previous map.

3.3.2 Historical Aerial Photography

Historical site uses can frequently be ascertained from a review of aerial photographs. Aerial photographs of the Project area and surrounding area were provided by EDR for the following years: 1938, 1946, 1949, 1952, 1967, 1974, 1985, 1989, 1990, 1994, 2005, 2009, 2012, and 2016. The EDR Aerial Photo Decade Package is included in Appendix D, and a summary of the aerial photograph review is provided in Table 4.

Table 4. Historical Aerial Photograph Summary

Year	Source	Project Area Use Description/Significant Changes
1938	USDA, 1" = 500'	The area appears rural with some agricultural fields but largely open space likely used for grazing. Approximately four structures are visible throughout the photograph and about five roads.
1946, 1949	USGS, 1" = 500'	The photograph appears similar to the previous photograph.
1952	USDA, 1" = 500'	A new road was built to the southwest of the Project site and what appear to be residential homes/properties were built to the east of the Project site.
1967	USGS, 1" = 500'	Several roads were built, primarily to the south of the Bridge. Santiago Canyon Road (S18) is under construction, to the southwest of the Bridge. Additional structures built east of the Bridge.
1974	USGS, 1" = 500'	The photograph appears similar to the previous photograph.
1985	USDA, 1" = 500'	Most of the air photo is not visible; More development to the east of the Bridge.
1989	USDA, 1" = 500'	Additional development throughout the site was observed, primarily to the southwest (where multiple large homes were built along the roads) and northwest of the Project site. Several roads were added to the north and northeast of the Project site.
1990	USDA, 1" = 500'	The photograph appears similar to the previous photograph.
1994	USGS/DOQQ, 1" = 500'	More homes were constructed to the southwest of the Project site and further development of the adjoining properties to the southwest and northeast of the Project site.
2005	USDA/NAIP 1" = 500'	The photograph appears similar to the previous photograph with more housing built to the northeastern adjoining area and southern area of the Project site.
2009	USDA/NAIP 1" = 500'	Additional development throughout the photographed area, primarily the neighborhood to the west southwest of the Project site.
2012, 2016	USDA/NAIP 1" = 500'	The photograph appears similar to the previous photograph.

3.3.3 Sanborn Fire Insurance Maps

Fire insurance maps (Sanborn Maps) are used to determine fire hazards and were produced for most urban areas beginning in the late 1800s. EDR searched for Sanborn Maps for the Project area and none were found. The Certified Sanborn® Map Report is included as Appendix E.

3.3.4 City Directory Review

Historical use near the Project area can be inferred from previous companies that may have operated at and in nearby facilities for the Project footprint. The Project area had listings in the research source (Haines Criss-Cross Directory and the EDR Digital Archive) for the years 1973 to 2014. The EDR City Directory Image Report is provided in Appendix F. A summary of the historical city directory records researched in proximity of the Project area is summarized in Table 5.

Table 5. City Directory Review Summary

Date Range	Description
2014	Modjeska Canyon Road – 28642 – Rse Structural Engineers.
2005	Modjeska Canyon Road – 29371 – Construction and Development Management I.
1995	Modjeska Canyon Road – 28728 – Assembly Systems Engineering.
1987	Modjeska Canyon Road – 28592 – Kersh Signs; 29122 – Sandlin Sons and Company; 29257 – Cooksmith Landscaping.
1982	Modjeska Canyon Road – 28642 – Newell Carpentry.
1976	Modjeska Canyon Road – 28592 – Kersh Signs; 28642 – Newell Carpentry.
1973	Modjeska Canyon Road – 28592 – Kersh Signs.

3.3.5 Local Agency Records Search

WRECO searched the Orange County Department for Public Records online and did not find any sites located within the vicinity of the Project area.

3.4 Reconnaissance of the Project Area and Vicinity

On July 16, 2019, a site reconnaissance was performed by BBC Environmental, Inc. (BBC). The general site setting appeared consistent with the documented historical uses. The site is a rural area that has been used as grazing, wooded areas, residential use, and minor agriculture. The area remains predominantly comprised of dense natural forest areas, despite an increase in residential homes. Photographs from the site reconnaissance are provided in Appendix G. The Caltrans ISA Checklist is provided in Appendix H.

From the site reconnaissance, potential RECs within the Project area include:

- Structural elements of the bridge may contain ACM in the concrete, caulking connecting parts of the bridge, and the concrete supports beneath the bridge;
- LBP in the yellow traffic striping as well as on the painted wood metal railings on the north and south sides of the bridge; and
- Potential ADL in exposed soil along the roadway, south of the bridge, from historical vehicle emissions during the leaded gasoline era.
- Historical agricultural practices to the southwest (pesticides, metals), adjoining property to the bridge, could have potential impact on the soil in the creek;
- Utility poles along the roadway may contain metals (arsenic, chromium, and copper) petroleum hydrocarbons (creosote), and pentachlorophenol; and
- Pole-mounted transformers on the utility poles may have potential polychlorinated biphenyls (PCB).

3.5 ISA Findings and Recommendations

According to historical records, the Project area has been used for residential and natural forest use, with some minor agricultural uses. There is little development in the area beyond the number of residential homes. The Project area has always been a rural setting with dense forest.

Based on the findings of the ISA, a Preliminary Site Investigation (PSI) is recommended for the Bridge/Project area. The ISA identified several potential RECs, summarized in Table 6.

Table 6. Summary of RECs and Recommendations

Description	Evidence of REC Found	Recommended Actions
Agricultural Fields	Due to agricultural use of the land to the southwest, organochlorine pesticides (OCP), organophosphorus pesticides (OPP), and heavy metals may be present within soil in Santiago Creek.	PSI: -Soil sampling for OCP, OPP and heavy metals.
ADL	There is potential for elevated levels of lead in exposed soil from historical vehicle emissions, since leaded gasoline was used through the 1970s and the shoulders of the roadway, south of the bridge, may contain ADL.	PSI: -Soil sampling for total lead.
Utility Poles and Pole-mounted Transformers	Treated wood poles (utility poles) along the side of the road may contain a variety of chemicals (arsenic, chromium, copper, creosote, and pentachlorophenol) that can runoff and impact soil. Pole-mounted transformers located to the northeast of the bridge, may contain PCBs and metals.	PSI: -Soil sampling for PCBs, pentachlorophenol, creosote, and heavy metals. (If utility poles will be moved or replaced, abate transformers prior to construction)
Existing Bridge Structure May Contain LBP and ACM	Due to the age of the bridge, there is potential for LBP and ACM within the structure, and the potential for LBP associated with traffic striping.	PSI: -Structural elements sampling for LBP and ACM.

4 LIMITATIONS

The scope of an ISA is limited to anecdotal and visual evidence of potential RECs and does not include verification of RECs based upon environmental testing. The ISA for the Modjeska Canyon Road Bridge Replacement Project located in Orange County, California, was performed in general accordance with Caltrans standards and AAI procedures and guidelines. All readily available materials pertaining to the Project area were reviewed to prepare this document. Opinions given in this ISA report, relative to the potential for hazardous materials to exist within the Project area, are based on the information derived from the site reconnaissance conducted on July 16, 2020, and from other research information and sources described herein.

As is the case for any project that proposes excavation, the potential exists for unknown hazardous contamination to be revealed during Project construction. The ISA is not a site investigation to prove that the Project area is environmentally devoid of hazardous or toxic materials. Information and data were provided by presumably competent third parties with knowledge about the site and surrounding areas.

This ISA consists of professional opinions and recommendations made in accordance with generally accepted environmental principles and practices. The conclusions are based upon an evaluation of the information gathered and general observations of conditions prevalent at the Project area during the site visit. This ISA does not otherwise provide any implied or expressed guarantees regarding the characteristics or conditions of environmental media at the Project area. Readily available public information sources were reviewed and presumed to provide complete and accurate information, without independent verification. The findings and conclusions in this report are based solely on the limited scope of an ISA, and it is not warranted that the Project area does not contain hazardous materials or petroleum hydrocarbon releases in areas not identified in this report.

This ISA is not intended to identify ALL hazards or unsafe conditions or to imply that others do not exist. This assessment was planned and implemented based on a mutually agreed scope of work and WRECO's experience in performing this type of assessment. WRECO has performed this assessment in a professional manner using the degree of skill and care exercised for similar projects under similar conditions by reputable and competent environmental consultants. WRECO shall not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time that this survey was conducted.

WRECO states that no warranties, expressed or implied are made regarding the quality, fitness, or results to be achieved because of this report or impacted by information not properly disclosed to WRECO at the time of this report. No responsibility is assumed for the control or correction of conditions or practices existing at the Project area.

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5 REFERENCES

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**Appendix A Preliminary Environmental Screening Signed
October 26, 2017**

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EXHIBIT 6-A PRELIMINARY ENVIRONMENTAL STUDY (PES)

Federal Project No.: <u>BRLO-5955(094)</u> <small>(Federal Program Prefix-Project No., Agreement No.)</small>	Final Design: <u>9/2018</u> <small>(Expected Start Date)</small>
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To: <u>Monroe Johnson</u> <small>(District Local Assistance Engineer)</small> <u>Caltrans District 12</u> <small>(District)</small> <u>1750 East 4th Street, Suite 100</u> <small>(Address)</small> <u>Santa Ana, CA 92705</u> <small>(Email Address)</small>	From: <u>Orange County Public Works</u> <small>(Local Agency)</small> <u>Wei Zhu, PE, PMP 714.647.3976</u> <small>(Project Manager's Name and Telephone No.)</small> <u>300 N. Flower Street Santa Ana, CA 92703</u> <small>(Address)</small> <u>wei.zhu@ocpw.ocgov.com</u> <small>(Email Address)</small>
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Is this Project "ON" the State Highway System? Yes No **IF YES, STOP HERE** and contact the District Local Assistance Engineer regarding the completion of other environmental documentation.

Federal State Transportation Improvement Program (FSTIP) http://www.dot.ca.gov/hq/transprog/fedpgm.htm	<u>01/05/2017</u> <small>(Currently Adopted Plan Date)</small>	<u>Amendment No. 17-04</u> <small>(Page No.11&12 attach to this form)</small>
http://www.dot.ca.gov/hq/transprog/oftmp.htm		

Programming for FSTIP:	<u>15/16</u> \$ _____ <small>(Fiscal Year) (Dollars)</small>	<u>0</u> \$ _____ <small>(Fiscal Year) (Dollars)</small>	<u>19/20</u> \$ _____ <small>(Fiscal Year) (Dollars)</small>
	Preliminary Engineering	Right of Way	Construction

Project Description as Shown in RTP and FSTIP: Grouped projects for Bridge Rehabilitation and Reconstruction – HBP Program – Projects are consistent with 40 CFR Part 93.126 Exempt Tables 2 categories –Widening narrow pavements or reconstructing bridges (no additional travel lanes).

Detailed Project Description: The Modjeska Canyon Road Bridge Project (Bridge No. 55C-0172). Refer to the notes section for a detailed project description. See page 6-83.

Preliminary Design Information:

Does the project involve any of the following? Please check the appropriate boxes and delineate on an attached map, plan, or layout including any additional pertinent information.

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<input checked="" type="checkbox"/>	<input type="checkbox"/>	Right of way acquisition (if yes, attach map with APN)																																																																																				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Disposal/borrow sites																																																																																				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Part of larger adjacent project																																																																																				
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Railroad																																																																																				

Required Attachments:

- Regional map Project location map APN map Project footprint map (existing/proposed right of way)
 Engineering drawings (existing and proposed cross sections), if available Borrow/disposal site location map, if applicable
 (Note: all maps (except project location map and regional maps) should be consistent with the project description (minimum scale: 1" = 200').)
 Notes to support the conclusions of this checklist/project description continuation page (attached)

Examine the project for potential effects on the environment, direct or indirect and answer the following questions. The "construction area," as specified below, includes all areas of ground disturbance associated with the project, including staging and stockpiling areas and temporary access roads.

Each answer must be briefly documented on the "Notes" pages at the end of the PES Form.

A. Potential Environmental Effects	Yes	To Be Determined	No
General			
1. Will the project require future construction to fully utilize the design capabilities included in the proposed project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Will the project generate public controversy?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Noise			
3. Is the project a Type I project as defined in 23 CFR 772.5(h); "construction on new location or the physical alteration of an existing highway, which significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes"?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Does the project have the potential for adverse construction-related noise impact? (such as related to pile driving)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air Quality			
5. Is the project in a NAAQS non-attainment or maintenance area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is the project exempt from the requirement that a conformity determination be made? (If "Yes," state which conformity exemption in 40 CFR 93.126, Table 2 applies): Projects that correct, or eliminate a hazardous location or feature under the "Safety" category.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Is the project exempt from regional conformity? (If "Yes," state which conformity exemption in 40 CFR 93.127, Table 3 applies): _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. If project is not exempt from regional conformity, (If "No" on Question #7)			
Is project in a metropolitan non-attainment/maintenance area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is project in an isolated rural non-attainment area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is project in a CO, PM10 and/or PM2.5 non-attainment/maintenance area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hazardous Materials/Hazardous Waste			
9. Is there potential for hazardous materials (including underground or aboveground tanks, etc.) or hazardous waste (including oil/water separators, waste oil, asbestos-containing material, lead-based paint, ADL, etc.) within or immediately adjacent to the construction area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Water Quality/Resources			
10. Does the project have the potential to impact water resources (rivers, streams, bays, inlets, lakes, drainage sloughs) within or immediately adjacent to the project area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Is the project within a designated sole-source aquifer?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Coastal Zone			
12. Is the project within the State Coastal Zone, San Francisco Bay, or Suisun Marsh?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Floodplain			
13. Is the construction area located within a regulatory floodway or within the base floodplain (100-year elevation of a watercourse or lake)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wild and Scenic Rivers			
14. Is the project within or immediately adjacent to a Wild and Scenic River System?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Biological Resources

- 15. Is there a potential for federally listed threatened or endangered species, or their critical habitat or essential fish habitat to occur within or adjacent to the construction area?
- 16. Does the project have the potential to directly or indirectly affect migratory birds, or their nests or eggs (such as vegetation removal, box culvert replacement/repair, bridge work, etc.)?
- 17. Is there a potential for wetlands to occur within or adjacent to the construction area?
- 18. Is there a potential for agricultural wetlands to occur within or adjacent to the construction area?
- 19. Is there a potential for the introduction or spread of invasive plant species?

Sections 4(f) and 6(f)

- 20. Are there any historic sites or publicly owned public parks, recreation areas, wildlife or waterfowl refuges (Section 4[f]) within or immediately adjacent to the construction area?
- 21. Does the project have the potential to affect properties acquired or improved with Land and Water Conservation Fund Act (Section 6[f]) funds?

Visual Resources

- 22. Does the project have the potential to affect any visual or scenic resources?

Relocation Impacts

- 23. Will the project require the relocation of residential or business properties?

Land Use, Community, and Farmland Impacts

- 24. Will the project require any right of way, including partial or full takes? Consider construction easements and utility relocations.
- 25. Is the project inconsistent with plans and goals adopted by the community?
- 26. Does the project have the potential to divide or disrupt neighborhoods/communities?
- 27. Does the project have the potential to disproportionately affect low-income and minority populations?
- 28. Will the project require the relocation of public utilities?
- 29. Will the project affect access to properties or roadways?
- 30. Will the project involve changes in access control to the State Highway System (SHS)?
- 31. Will the project involve the use of a temporary road, detour, or ramp closure?
- 32. Will the project reduce available parking?
- 33. Will the project construction encroach on state or federal lands?
- 34. Will the project convert any farmland to a different use or impact any farmlands?

Cultural Resources

- 35. Is there National Register listed, or potentially eligible historic properties, or archaeological resources within or immediately adjacent to the construction area?
(Note: Caltrans PQS answers question #35)
- 36. Is the project adjacent to, or would it encroach on Tribal land?

For Sections B, C, and D, check appropriate box to indicate required technical studies, coordination, permits, or approvals.

B. Required Technical Studies and Analyses	C. Coordination	D. Anticipated Actions/Permits/Approvals
<input type="checkbox"/> Traffic <i>Check one:</i>		
<input type="checkbox"/> Traffic Study	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input type="checkbox"/> Technical Memorandum	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input type="checkbox"/> Discussion in ED Only	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input checked="" type="checkbox"/> Noise <i>Check as applicable:</i>		

<input type="checkbox"/> Traffic Related		
<input checked="" type="checkbox"/> Construction Related		
<i>Check one:</i>		
<input type="checkbox"/> Noise Study Report	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input type="checkbox"/> NADR	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input type="checkbox"/> Technical Memorandum	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input checked="" type="checkbox"/> Discussion in ED Only	<input checked="" type="checkbox"/> Caltrans	<input checked="" type="checkbox"/> Approval
<input checked="" type="checkbox"/> Air Quality		
<i>Check as applicable:</i>		
<input type="checkbox"/> Traffic Related		
<input type="checkbox"/> Construction Related		
<i>Check one:</i>		
<input type="checkbox"/> Air Quality Report	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input type="checkbox"/> Technical Memorandum	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input checked="" type="checkbox"/> Discussion in ED Only	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
	<input type="checkbox"/> FHWA	<input type="checkbox"/> Conformity Finding (23 USC 327 CEs, EAs, EISs)
	<input checked="" type="checkbox"/> Caltrans	<input checked="" type="checkbox"/> Conformity Finding (23 USC 326 CEs)
	<input type="checkbox"/> Regional Agency	<input type="checkbox"/> PM10/PM2.5 Interagency Consultation
<input checked="" type="checkbox"/> Hazardous Materials/ Hazardous Waste		
<i>Check as applicable:</i>		
<input checked="" type="checkbox"/> Initial Site Assessment (Phase 1)	<input checked="" type="checkbox"/> Caltrans	<input checked="" type="checkbox"/> Approval
<input type="checkbox"/> Preliminary Site Assessment (Phase 2)	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input type="checkbox"/> Discussion in ED Only	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
	<input type="checkbox"/> Cal EPA DTSC	<input type="checkbox"/> Review Database
	<input type="checkbox"/> Local Agency	<input type="checkbox"/> Review Database
<input checked="" type="checkbox"/> Water Quality/Resources		
<i>Check as applicable:</i>		
<input type="checkbox"/> Water Quality Assess. Report	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input type="checkbox"/> Technical Memorandum	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input checked="" type="checkbox"/> Discussion in ED Only	<input checked="" type="checkbox"/> Caltrans	<input checked="" type="checkbox"/> Approval
<input type="checkbox"/> Sole-Source Aquifer (Districts 5, 6 and 11)	<input type="checkbox"/> EPA (S.F. Regional Office)	<input type="checkbox"/> Approval of Analysis in ED
<input type="checkbox"/> Coastal Zone	<input type="checkbox"/> CCC	<input type="checkbox"/> Coastal Zone Consistency Determination

B. Required Technical Studies and Analyses	C. Coordination	D. Anticipated Actions/Permits/Approvals
<input checked="" type="checkbox"/> Floodplain		
<i>Check as applicable:</i>		
<input checked="" type="checkbox"/> Location Hydraulic Study	<input checked="" type="checkbox"/> Caltrans	<input checked="" type="checkbox"/> Approval
<input type="checkbox"/> Floodplain Evaluation Report	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input checked="" type="checkbox"/> Summary Floodplain Encroachment Report	<input checked="" type="checkbox"/> Caltrans	<input checked="" type="checkbox"/> Approval
	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Only Practicable Alternative Finding
	<input type="checkbox"/> FHWA	<input type="checkbox"/> Approves significant encroachments and concurs in Only Practicable Alternative Findings
<input type="checkbox"/> Wild and Scenic Rivers		
	<input type="checkbox"/> River Managing Agency	<input type="checkbox"/> Wild and Scenic Rivers Determination
<input checked="" type="checkbox"/> Biological Resources		
<i>Check as applicable:</i>		
<input checked="" type="checkbox"/> NES, Minimal Impact	<input checked="" type="checkbox"/> Caltrans	<input checked="" type="checkbox"/> Approval
<input type="checkbox"/> NES		
<input type="checkbox"/> BA	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approves for Consultation
	<input type="checkbox"/> USFWS	<input type="checkbox"/> Section 7 Informal/Formal Consultation
	<input type="checkbox"/> NOAA Fisheries	
<input type="checkbox"/> EFH Evaluation	<input type="checkbox"/> NOAA Fisheries	<input type="checkbox"/> MSA Consultation
<input type="checkbox"/> Bio-Acoustic Evaluation	<input type="checkbox"/> NOAA Fisheries	<input type="checkbox"/> Approval
<input type="checkbox"/> Technical Memorandum	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input type="checkbox"/> Wetlands		
<i>Check as applicable:</i>		
<input type="checkbox"/> WD and Assessment	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
	<input type="checkbox"/> ACOE	<input type="checkbox"/> Wetland Verification
	<input type="checkbox"/> NRCS	<input type="checkbox"/> Agricultural Wetland Verification
	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Wetlands Only Practicable Alternative Finding
<input type="checkbox"/> Invasive Plants		
<input type="checkbox"/> Discussion in ED Only	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input type="checkbox"/> Section 4(f)		
<i>Check as applicable:</i>		
	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Determine Temporary Occupancy
<input type="checkbox"/> De minimis	<input type="checkbox"/> Caltrans	<input type="checkbox"/> De minimis finding
<input type="checkbox"/> Programmatic 4(f) Evaluation Type: _____	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
<input type="checkbox"/> Individual 4(f) Evaluation	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval
	<input type="checkbox"/> Agency with Jurisdiction	
	<input type="checkbox"/> SHPO	
	<input type="checkbox"/> DOI	
	<input type="checkbox"/> HUD	
	<input type="checkbox"/> USDA	

B. Required Technical Studies and Analyses	C. Coordination	D. Anticipated Actions/Permits/Approvals
<input type="checkbox"/> Section 6(f)	<input type="checkbox"/> Agency with Jurisdiction <input type="checkbox"/> NPS	<input type="checkbox"/> Determines Consistency with Long-Term Management Plan
	<input type="checkbox"/> NPS	<input type="checkbox"/> Approves Conversion
<input type="checkbox"/> Visual Resources <input type="checkbox"/> Technical Memorandum <input type="checkbox"/> Minor VIA <input type="checkbox"/> Moderate VIA <input type="checkbox"/> Advance/Complex VIA	<input type="checkbox"/> Caltrans <input type="checkbox"/> Caltrans <input type="checkbox"/> Caltrans <input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval <input type="checkbox"/> Approval <input type="checkbox"/> Approval <input type="checkbox"/> Approval
<input type="checkbox"/> Relocation Impacts <i>Check one:</i> <input type="checkbox"/> Relocation Impact Memo <input type="checkbox"/> Relocation Impact Study <input type="checkbox"/> Relocation Impact Report	<input type="checkbox"/> Caltrans <input type="checkbox"/> Caltrans <input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval <input type="checkbox"/> Approval <input type="checkbox"/> Approval
<input checked="" type="checkbox"/> Land Use and Community Impacts <i>Check one:</i> <input type="checkbox"/> CIA <input type="checkbox"/> Technical Memorandum <input checked="" type="checkbox"/> Discussion in ED Only	<input type="checkbox"/> Caltrans <input type="checkbox"/> Caltrans <input checked="" type="checkbox"/> Caltrans	<input type="checkbox"/> Approval <input type="checkbox"/> Approval <input checked="" type="checkbox"/> Approval
<input type="checkbox"/> Construction/Encroachment on State Lands <i>Check as applicable:</i> <input type="checkbox"/> SLC Jurisdiction <input type="checkbox"/> Caltrans Jurisdiction <input type="checkbox"/> SP Jurisdiction	<input type="checkbox"/> SLC <input type="checkbox"/> Caltrans <input type="checkbox"/> SP	<input type="checkbox"/> SLC Lease <input type="checkbox"/> Encroachment Permit <input type="checkbox"/> Encroachment Permit
<input type="checkbox"/> Construction/Encroachment on Federal Lands	<input type="checkbox"/> Federal Agency with Jurisdiction	<input type="checkbox"/> Encroachment Permit
<input type="checkbox"/> Construction/Encroachment On Indian Trust Lands	<input type="checkbox"/> Bureau of Indian Affairs	<input type="checkbox"/> Right of Way Permit
<input type="checkbox"/> Farmlands <i>Check one:</i> <input type="checkbox"/> CIA <input type="checkbox"/> Technical Memorandum <input type="checkbox"/> Discussion in ED Only	<input type="checkbox"/> Caltrans <input type="checkbox"/> Caltrans <input type="checkbox"/> Caltrans	<input type="checkbox"/> Approval <input type="checkbox"/> Approval <input type="checkbox"/> Approval
<i>Check as applicable:</i> <input type="checkbox"/> Form AD 1006 <input type="checkbox"/> Conversion to Non-Agri Use	<input type="checkbox"/> NRCS <input type="checkbox"/> CDOC <input type="checkbox"/> ACOE	<input type="checkbox"/> Approves Conversion <input type="checkbox"/> Approves Conversion

B. Required Technical Studies and Analyses	C. Coordination	D. Anticipated Actions/Permits/Approvals
<input checked="" type="checkbox"/> Cultural Resources (PQS completes this section) <i>Check as applicable:</i>		
<input checked="" type="checkbox"/> APE Map	<input checked="" type="checkbox"/> Caltrans PQS <input checked="" type="checkbox"/> Caltrans PQS and DLAE	<input type="checkbox"/> Screened Undertaking <input checked="" type="checkbox"/> Approves APE Map
	<input checked="" type="checkbox"/> Local Preservation Groups and/or Native American Tribes	<input checked="" type="checkbox"/> Provides Comments Regarding Concerns with Project
<input checked="" type="checkbox"/> HPSR <input checked="" type="checkbox"/> ASR <input checked="" type="checkbox"/> HRER <i>IF APPLICABLE</i>	<input checked="" type="checkbox"/> Caltrans	<input checked="" type="checkbox"/> Approves for Consultation
<input type="checkbox"/> Finding of Effect Report	<input type="checkbox"/> Caltrans	<input type="checkbox"/> Concurs on No Effect, No Adverse Effect with Standard Conditions
	<input type="checkbox"/> SHPO	<input type="checkbox"/> Letter of Concurrence on Eligibility, No Adverse Effect without Standard
<input type="checkbox"/> MOA	<input type="checkbox"/> Caltrans <input type="checkbox"/> SHPO <input type="checkbox"/> ACHP (if requested)	<input type="checkbox"/> Approves MOA <input type="checkbox"/> Approves MOA <input type="checkbox"/> Approves MOA
<input checked="" type="checkbox"/> Permits Copies of permits and a list of mitigation commitments are mandatory submittals following NEPA approval.	<input checked="" type="checkbox"/> ACOE <input checked="" type="checkbox"/> ACOE <input type="checkbox"/> Caltrans/ACOE/EPA <input type="checkbox"/> USFWS <input type="checkbox"/> NOAA Fisheries <input type="checkbox"/> ACOE <input type="checkbox"/> USCG <input checked="" type="checkbox"/> RWQCB <input checked="" type="checkbox"/> CDFG <input checked="" type="checkbox"/> RWQCB <input type="checkbox"/> CCC <input type="checkbox"/> Local Agency <input type="checkbox"/> BCDC	<input checked="" type="checkbox"/> Section 404 Nationwide Permit <input checked="" type="checkbox"/> Section 404 Individual Permit <input type="checkbox"/> NEPA/404 Integration MOU <input type="checkbox"/> Rivers and Harbors Act Section 10 Permit <input type="checkbox"/> USCG Bridge Permit <input checked="" type="checkbox"/> Section 401 Water Quality Certification <input type="checkbox"/> Section 1602 Streambed Alteration Agreement <input type="checkbox"/> NPDES Permit <input type="checkbox"/> Coastal Zone Permit <input type="checkbox"/> BCDC Permit

Notes: Additional studies may be required for other federal agencies.

ACHP	=	Advisory Council on Historic Preservation	HRER	=	Historical Resources Evaluation Report
ACOE	=	U.S. Army Corps of Engineers	HUD	=	U.S. Housing and Urban Development
ADL	=	Aerially Deposited Lead	MOA	=	Memorandum of Agreement
APE	=	Area of Potential Effect	MSA	=	Magnuson-Stevens Fishery Conservation and Management Act
APN	=	Assessor Parcel Number	NEPA	=	National Environmental Policy Act
ASR	=	Archaeological Survey Report	NADR	=	Noise Abatement Decision Report
BA	=	Biological Assessment	NES	=	Natural Environment Study
BCDC	=	Bay Conservation and Development Commission	NHPA	=	National Historic Preservation Act
BE	=	Biological Evaluation	NOAA	=	National Oceanic and Atmospheric Administration
BO	=	Biological Opinion	NMFS	=	National Marine Fisheries Service
Cal EPA	=	California Environmental Protection Agency	NPDES	=	National Pollutant Discharge Elimination System
CCC	=	California Coastal Commission	NPS	=	National Park Service
CDFG	=	California Department of Fish and Game	NRCS	=	Natural Resources Conservation Service
CDOC	=	California Department of Conservation	PM10	=	Particulate Matter 10 Microns in Diameter or Less
CE	=	Categorical Exclusion	PM2.5	=	Particulate Matter 2.5 Microns in Diameter or Less
CIA	=	Community Impact Assessment	PMP	=	Project Management Plan
CWA	=	Clean Water Act	PQS	=	Professionally Qualified Staff
DLAE	=	District Local Assistance Engineer	ROD	=	Record of Decision
DOI	=	U.S. Department of Interior	RTIP	=	Regional Transportation Improvement Program
DTSC	=	Department of Toxic Substances Control	RTP	=	Regional Transportation Plan
EA	=	Environmental Assessment	RWQCB	=	Regional Water Quality Control Board
ED	=	Environmental Document	SER	=	Standard Environmental Reference
EFH	=	Essential Fish Habitat	SEP	=	Senior Environmental Planner
EIS	=	Environmental Impact Statement	SHPO	=	State Historic Preservation Officer
EPA	=	U.S. Environmental Protection Agency	SLC	=	State Lands Commission
FEMA	=	Federal Emergency Management Agency	SP	=	State Parks
FHWA	=	Federal Highway Administration	TIP	=	Transportation Improvement Program
FONSI	=	Finding of No Significant Impacted	USCG	=	U.S. Coast Guard
FTIP	=	Federal Transportation Improvement Program	USDA	=	U.S. Department of Agriculture
HPSR	=	Historic Property Survey Report	USFWS	=	U.S. Fish and Wildlife Service
			WD	=	Wetland Delineation

E. Preliminary Environmental Document Classification (NEPA)

Based on the evaluation of the project, the environmental document to be developed should be:

Check one:

- Environmental Impact Statement (Note: Engagement with participating agencies in accordance with 23 USC 139 required)
 - Compliance with 23 USC 139 regarding Participating Agencies required
- Complex Environmental Assessment
- Routine Environmental Assessment
- Categorical Exclusion without required technical studies.
- Categorical Exclusion with required technical studies

(If Categorical Exclusion is selected, check one of the following):

- Section 23 USC 326
 - 23 CFR 771 activity (c)(28)
 - 23 CFR 771 activity (d) (13)
 - Activity _____ listed in the Section 23 USC 326
- Section 23 USC 327

F. Public Availability and Public Hearing

Check as applicable:

- Not Required
- Notice of Availability of Environmental Document
- Public Meeting
- Notice of Opportunity for a Public Hearing
- Public Hearing Required

G. Signatures

Local Agency Staff and/or Consultant Signature



 (Signature of Preparer)

09.18.17 714.667.1632

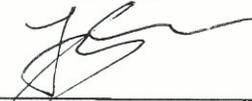
 (Date) (Telephone No.)

Kevin Shannon

 (Name)

Local Agency Project Engineer Signature

This document was prepared under my supervision, according to the *Local Assistance Procedures Manual*, Exhibit 6-B, "Instructions for Completing the Preliminary Environmental Study Form."



 (Signature of Local Agency)

09.18.17 _____

 (Date) (Telephone No.)

Preliminary Environmental Investigation

Notes to Support the Conclusions of the PES Form

(May Also Include Continuation of Detailed Project Description)

DETAILED PROJECT DESCRIPTION *(continued from page 6-73)*

Purpose and Need. Caltrans' Structures Maintenance and Investigations (SM&I) stated the Modjeska Canyon Bridge (Bridge No. 55C-0172) is eligible for replacement due to the fact that its Sufficiency Rating (SR) is less than 80 (SR=34.3) and that is also has been flagged as Structurally Deficient (SD).

The Modjeska Canyon Road Bridge, constructed in 1935, provides the main access for approximately 220 homes in Modjeska Canyon, the Modjeska Fire Station, the Tucker Wildlife Sanctuary, the Modjeska Canyon Nature Preserve, and visitors to the Helena Modjeska Historic House and Gardens. It is critical to keep the bridge in service and avoid potential deficiencies that would take the bridge out of service. Seasonal floods and wild fires occur in the Santa Ana Mountains that affect this community and quick emergency access from the Canyon is necessary during such events. In 2007, the Santiago Fire forced evacuation of residents of Modjeska Canyon and their principal means of evacuation was across this bridge. The road distance from this bridge to Santiago Canyon Road (County Road S18) is approximately 0.80 miles. Modjeska Grade Road provides the only alternate access for Modjeska Canyon and evacuees would be required to traverse approximately 1.40 road miles before reaching Santiago Canyon Road.

A public outreach was held on April 10, 2014 at Orange County Fire Station No. 16 and was open to the public. The purpose of this meeting was to obtain comments on the bridge closure and detour. Additional public outreach will be conducted throughout the design phase.

Project Location and Limits. The bridge is located in the unincorporated community of Modjeska Canyon along Modjeska Canyon Road approximately 0.40 miles (0.80 road miles) east of Santiago Canyon Road. The bridge is immediately south of the intersection of Santiago Canyon Road and Modjeska Grade Road. Regionally, the bridge is located between the unincorporated community of Silverado approximately 2.75 miles to the north and City of Lake Forest approximately 0.75 miles to the southwest.

Project Description. The project includes removal of the existing two-lane steel I-girder superstructure with steel floor beam bridge, abutments and retaining walls; temporary closure of Modjeska Canyon Road; and construction of a 2-lane standard 36-foot width, pre-cast, pre-stressed concrete I-girder bridge, abutments, and retaining walls in the same skew and approximate length (65 feet). Refer to the bridge cross section diagram. The bridge is located on a private parcel; therefore, a minor amount of right-of-way would be necessary. The bridge width selected has been modified from full standard curb to curb width of 40' to 34' to match the rural community road while adding sidewalk and roadway shoulders not currently provided. The project will also require utility relocation for an existing water line, coordination with the U.S. Geological Survey and OC Watersheds for the protection of the creek monitoring station adjacent to the bridge, and coordination with the owner of the adjacent power poles to protect the poles and overhead lines during construction activities. There will be a maximum excavation of 50 feet to construct new spread footings. The bridge will be widened to add shoulders; however, there will not be any road realignment. Minor storm drain/culvert installation is proposed to treat runoff. The existing abutments need to be removed and channel work is required to install the new abutments/footings. A road easement will be needed from the parcel owner to allow public access onto the property. A temporary construction easement will be acquired from the same property owner to stage materials and equipment at the southwest area of the bridge. One oak tree needs to be removed and vegetation will be trimmed to allow access to the channel. All other native plants/trees will be protected in place.

Schedule and Cost. The estimated duration of construction is approximately 225 days with construction anticipated to commence in September, 2019 and conclude in September, 2020. Of this estimated duration, the bridge will be closed for approximately four months. One travel lane cannot remain open because the bridge is fracture critical. The construction cost estimate is approximately \$1,152,000.

Brief Explanation of How Project Complies, or Will Comply with Applicable Federal Mandate (Part A):

GENERAL

1. The project will not require future construction to fully utilize the design capabilities included in the proposed project. Moreover, the project will have independent utility and be fully usable upon completion.
2. The project will not generate public controversy. Replacing the bridge would benefit the community and serve all residents and visitors to Modjeska Canyon. In addition, the Modjeska Fire Station would be able to maintain fire protection services.

NOISE

3. The project is not classified as a Type 1 project. The project does not propose a change in the vertical or horizontal alignment. The project replaces an existing bridge. The number of travel lanes will not increase; however, shoulders will be added on both sides. As such, the project is not a Type 1 project as defined by 23 CFR 772.5(h).
4. Temporary construction-related noise impacts would be associated with the dismantling and replacing the bridge. Pile driving is not proposed. However, spread footing or CIDH piles may be used. The nearest residential structure to the bridge is approximately 90 feet and the next nearest residential structure is approximately 160 feet from the bridge. Construction would be required to comply with the provisions of the Orange County Noise Control Ordinance and noise control regulations.

AIR QUALITY

5. The site is located within the South Coast Air Quality Management District. According to the Areas Subject to Transportation Conformity Requirements In California Table (March 20, 2016), the following criteria pollutants are in non-attainment or maintenance:

Maintenance: Carbon Monoxide and Nitrogen Dioxide

Non-attainment: Ozone, Particulate Matter (PM₁₀) and PM_{2.5} (1997 and 2006 standards)

6. The project is exempt from the provisions of 40 CFR 93.126. Projects to correct, improve, or eliminate a hazardous location or features are listed on Table 2 (Exempt Projects) under Safety.
7. Because the project is exempt from the provisions of 40 CFR 93.126, a regional conformity analysis is not required.
8. Because the project is exempt from the provisions of 40 CFR 93.126, a regional conformity analysis is not required.

HAZARDOUS MATERIALS / HAZARDOUS WASTE

9. No hazardous materials are located within or immediately adjacent to the project site although the bridge may contain lead-based paint. The California Department of Substances Control EnviroStor program for hazardous wastes and substances was queried on November January 9, 2017. This review determined a former leaking underground storage tank cleanup site is located approximately 0.25 miles to the east. This case is closed (Regional Board case number RB083003153T and local case number 98UT022). The potential for hazardous materials are to be determined. An Initial Site Assessment (Phase I) will be conducted.

WATER QUALITY / RESOURCES

10. The bridge is located over Reach 4 of Santiago Creek and will require construction activities to be performed adjacent to and within this feature. Santiago Creek, classified as a River and Stream, is identified as a 303(d) impaired water body in the State Water Resources Control Board 2010 Integrated Report for the following pollutants: Salinity, Total Dissolved Solids (TDS), and Chlorides. This feature conveys runoff and storm water from the Santa Ana Mountains with a hundred year storm flow of 4,600 cubic feet per second. The bridge construction activities have the potential to impact water resources during the short-term construction phase; no impacts are anticipated during the long-term operations phase. Impacts will be eliminated or minimized with applicable Best Management Practices (BMPs) contained in the Orange County Stormwater Program's Construction Runoff Guidance Manual.
11. The site is not located within any of the four Sole-Source aquifers as depicted on the map on the U.S. EPA's website. Refer to the attached map that depicts the project site in relation to a Sole-Source aquifer.

COASTAL ZONE

12. The project site is located in Orange County, in Southern California and therefore not within the San Francisco Bay, or Suisun Marsh. The site is not located within the Coastal Zone according to the Orange County Zoning Map. The nearest Coastal Zone boundary is located approximately 10.5 miles to the southwest.

FLOODPLAIN

13. The site is located within Zone AE (Special Flood Hazard Area) according to FEMA's Flood Insurance Rate Map Panel Number 06059C0309J. Santiago Creek conveys flows from its watershed in the Santa Ana Mountains with a hundred year flow of approximately 4,600 cfs. Refer to the attached map.

WILD AND SCENIC RIVERS

14. The site is not within or adjacent to a Wild and Scenic River System according to the list provided by Caltrans' Environmental Handbook, Chapter 19. The nearest Wild and Scenic River is Bautastia Creek located approximately 45 miles east of the site in the San Bernardino National Forest and not within 0.25 miles of a protected corridor. Orange County does not contain any Wild and Scenic Rivers.

BIOLOGICAL RESOURCES

15. The IPaC Resources List generated by the U.S. Fish and Wildlife Service's Information for Planning Conservation database identified several threatened or endangered species in Orange County that could occur on the site and thereby be potentially impacted. Refer to the attached IPaC Resources List. The site is inland from the Pacific Ocean and would not have the potential to affect fish species covered by a Fisheries Management Plan.
16. The IPaC Resources List generated by the U.S. Fish and Wildlife Service's Information for Planning Conservation database identified several threatened or endangered species including migratory bird species in Orange County that could occur on the site and thereby be potentially impacted.. Refer to the attached IPaC Trust report.
17. The site is located in a wetland as identified by the National Wetland Inventory wetland mapper database (Version 2) and classified as Riverine Wetland and Freshwater Forested/Shrub Wetland (PFOA). The potential for construction activities for the single span bridge to impact this wetland would not occur because construction activities would not occur in the creek bottom or within the ordinary high water mark. Refer to the attached map depicting the proximity of the site to the National Wetland Inventory map.
18. The site is not located in Agricultural Wetlands as identified by the National Wetland Inventory wetland mapper database (Version 2). Refer to the attached map.
19. The California Invasive Plant Council's CalWeedMapper program does not identify the site as containing invasive plant species.

SECTIONS 4(f) AND 6(f)

20. No historic sites, publically owned parks, recreation areas, wildlife or waterfowl refuges located within or adjacent to the site. The HBP application does not identify the bridge as historic. In addition, Caltrans' Structure Maintenance and Investigations list of Historical Significance - Local Agency Bridges (October 2016) determined he bridge is not of historical significance. Refer to the attached list.
21. According to the National Park Service Land and Water Conservation Fund (LWCF), Detailed Listing of Grants, the site is not within or adjacent to properties that have used LWCF funds. This list was queried on January 12, 2017. Land uses adjacent to the site are rural residential.

VISUAL RESOURCES

22. According to the Visual Impact Assessment Checklist, the project received a score of eight (8) indicating a low potential to affect a visual or scenic resource. Refer to the attached Visual Impact Analysis.

RELOCATION IMPACTS

23. The project will replace the existing bridge in its current location. No residential or business properties would be affected by this project.

LAND USE, COMMUNITY, AND FARMLAND IMPACTS

24. The project will require a large amount of additional right-of-way (partial take). Approximately three (3) feet will be required to accommodate a sidewalk along the length of the bridge on the west side, which equates to 2,500 square feet. The majority of the proposed bridge will be located on private property.

25. The project is consistent with the land use concept of the Silverado-Modjeska Specific Plan and would not conflict with the general development guidelines.
26. The bridge will be replaced in the same location and does not have the potential to divide a community, disrupt the neighborhood and community cohesion, affect community resources, or affect employment. Land uses in the vicinity of the site are characterized by rural residential development. During the construction phase, access to a portion of the Modjeska Canyon community will be required to use Modjeska Grade Road as an alternate detour route.
27. The site is located in a rural, unincorporated portion of Orange County. According to the U.S. Census Bureau, American Fact Finder, Poverty Status in the past 12 Months, 2010-2014 American Community Survey 5-Year Estimates, the percent of minority population within Zip Code 92676 is 4.7 percent below the poverty level. The project will not have the potential to disproportionately affect low-income and minority populations.
28. The project will require the temporary relocation of a water line. The existing waterline attached to the bridge will require relocation. Overhead power lines and utility poles may require temporary or permanent relocation.
29. The project will eliminate vehicular access across this bridge during the short-term construction phase that would affect north/south and south/north connectivity. Once the new bridge has been installed, north/south and south/north connectivity would be restored. Modjeska Canyon Road/Markuson Road on the north side of the bridge would remain open and properties would continue to be able to access this roadway during the construction phase. Shadowland Circle and Modjeska Grade Road on the south side of the bridge would remain open and properties would continue to be able to access these roadways during the construction phase. Therefore, during the construction phase regional access to East Santiago Canyon Road (County Road S18) would be provided from either Modjeska Canyon Road/Markuson Road or Shadowland Circle and Modjeska Grade Road. Upon project completion, the layout and function of the connecting roadways would remain unchanged and no impact to abutting properties would occur.
30. The project would not involve changes in access control to the State Highway System. The nearest State Route is SR 241 (Eastern Transportation Corridor Toll Road) located approximately three (3) miles to the southwest. Refer to the attached map depicting the location of the project to State Highways.
31. For those properties located south of Santiago Creek the project will require the use of Modjeska Grade Road as a temporary detour during the construction phase; properties located north of Santiago Creek will use Modjeska Canyon Road as a detour. Modjeska Grade Road, a two-lane paved road, connects with East Santiago Canyon Road approximately (County Road S18) approximately 0.80 miles south of the project site. Road miles are approximately 1.40 miles. No ramps are located in close proximity to the site.
32. Existing parking is not located on or adjacent to the bridge. As a result, parking will not be affected.
33. No state or federal lands are adjacent to the project site.
34. The project replaces a bridge in the same location and is adjacent to rural residential development. According to the Orange County Important Farmland 2012 map, the site is classified as Urban and Built-Up Land; no Farmland is adjacent to the site.

CULTURAL RESOURCES

35. Impacts are to be determined by Caltrans' professionally qualified staff (PQS).
36. The site is not located on tribal lands nor is the site adjacent to any tribal lands.

Distribution 1) Original - DLAE, 2) Local Agency Project Manager, 3) DLA Environmental Coordinator
4) Senior Environmental Planner (or designee), 5) District PQS

Updated: 05/15/08

Appendix B EDR Radius Map™ Report with GeoCheck®

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Modjeska Canyon Road

Modjeska Canyon Road

Silverado, CA 92676

Inquiry Number: 6098671.2s

June 19, 2020

The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
 Please contact EDR at 1-800-352-0050
 with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

MODJESKA CANYON ROAD
SILVERADO, CA 92676

COORDINATES

Latitude (North): 33.7087500 - 33° 42' 31.50"
Longitude (West): 117.6363340 - 117° 38' 10.80"
Universal Transverse Mercator: Zone 11
UTM X (Meters): 441034.3
UTM Y (Meters): 3729851.8
Elevation: 1272 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5636489 EL TORO, CA
Version Date: 2012

East Map: 5636483 SANTIAGO PEAK, CA
Version Date: 2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140603
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:
MODJESKA CANYON ROAD
SILVERADO, CA 92676

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	MODJESKA CANYON ROAD		CIWQS	Higher	1 ft.
A2	MODJESKA CANYON ROAD		CERS	Higher	1 ft.

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing
SEMS..... Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG..... RCRA - Large Quantity Generators
RCRA-SQG..... RCRA - Small Quantity Generators
RCRA-VSQG..... RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System

EXECUTIVE SUMMARY

US ENG CONTROLS..... Engineering Controls Sites List
US INST CONTROLS..... Institutional Controls Sites List

Federal ERNS list

ERNS..... Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE..... State Response Sites

State- and tribal - equivalent CERCLIS

ENVIROSTOR..... EnviroStor Database

State and tribal landfill and/or solid waste disposal site lists

SWF/LF..... Solid Waste Information System

State and tribal leaking storage tank lists

LUST..... Geotracker's Leaking Underground Fuel Tank Report
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land
CPS-SLIC..... Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing
UST..... Active UST Facilities
AST..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing
VCP..... Voluntary Cleanup Program Properties

State and tribal Brownfields sites

BROWNFIELDS..... Considered Brownfields Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT..... Waste Management Unit Database
SWRCY..... Recycler Database
HAULERS..... Registered Waste Tire Haulers Listing
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations

EXECUTIVE SUMMARY

ODI..... Open Dump Inventory
IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register
HIST Cal-Sites..... Historical Calsites Database
SCH..... School Property Evaluation Program
CDL..... Clandestine Drug Labs
CERS HAZ WASTE..... CERS HAZ WASTE
Toxic Pits..... Toxic Pits Cleanup Act Sites
US CDL..... National Clandestine Laboratory Register
PFAS..... PFAS Contamination Site Location Listing

Local Lists of Registered Storage Tanks

SWEEPS UST..... SWEEPS UST Listing
HIST UST..... Hazardous Substance Storage Container Database
CERS TANKS..... California Environmental Reporting System (CERS) Tanks
CA FID UST..... Facility Inventory Database

Local Land Records

LIENS..... Environmental Liens Listing
LIENS 2..... CERCLA Lien Information
DEED..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
CHMIRS..... California Hazardous Material Incident Report System
LDS..... Land Disposal Sites Listing
MCS..... Military Cleanup Sites Listing
Orange Co. Industrial Site..... List of Industrial Site Cleanups
SPILLS 90..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR..... RCRA - Non Generators / No Longer Regulated
FUDS..... Formerly Used Defense Sites
DOD..... Department of Defense Sites
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR..... Financial Assurance Information
EPA WATCH LIST..... EPA WATCH LIST
2020 COR ACTION..... 2020 Corrective Action Program List
TSCA..... Toxic Substances Control Act
TRIS..... Toxic Chemical Release Inventory System
SSTS..... Section 7 Tracking Systems
ROD..... Records Of Decision
RMP..... Risk Management Plans
RAATS..... RCRA Administrative Action Tracking System
PRP..... Potentially Responsible Parties
PADS..... PCB Activity Database System
ICIS..... Integrated Compliance Information System
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

EXECUTIVE SUMMARY

MLTS.....	Material Licensing Tracking System
COAL ASH DOE.....	Steam-Electric Plant Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS.....	Incident and Accident Data
CONSENT.....	Superfund (CERCLA) Consent Decrees
INDIAN RESERV.....	Indian Reservations
FUSRAP.....	Formerly Utilized Sites Remedial Action Program
UMTRA.....	Uranium Mill Tailings Sites
LEAD SMELTERS.....	Lead Smelter Sites
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US MINES.....	Mines Master Index File
ABANDONED MINES.....	Abandoned Mines
FINDS.....	Facility Index System/Facility Registry System
UXO.....	Unexploded Ordnance Sites
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
ECHO.....	Enforcement & Compliance History Information
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN.....	Bond Expenditure Plan
Cortese.....	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings.....	CUPA Resources List
DRYCLEANERS.....	Cleaner Facilities
EML.....	Emissions Inventory Data
ENF.....	Enforcement Action Listing
Financial Assurance.....	Financial Assurance Information Listing
HAZNET.....	Facility and Manifest Data
ICE.....	ICE
HIST CORTESE.....	Hazardous Waste & Substance Site List
HWP.....	EnviroStor Permitted Facilities Listing
HWT.....	Registered Hazardous Waste Transporter Database
MINES.....	Mines Site Location Listing
MWMP.....	Medical Waste Management Program Listing
NPDES.....	NPDES Permits Listing
PEST LIC.....	Pesticide Regulation Licenses Listing
PROC.....	Certified Processors Database
Notify 65.....	Proposition 65 Records
UIC.....	UIC Listing
UIC GEO.....	UIC GEO (GEOTRACKER)
WASTEWATER PITS.....	Oil Wastewater Pits Listing
WDS.....	Waste Discharge System
WIP.....	Well Investigation Program Case List
MILITARY PRIV SITES.....	MILITARY PRIV SITES (GEOTRACKER)
PROJECT.....	PROJECT (GEOTRACKER)
WDR.....	Waste Discharge Requirements Listing
NON-CASE INFO.....	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS.....	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS.....	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT.....	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ.....	Well Stimulation Project (GEOTRACKER)
MINES MRDS.....	Mineral Resources Data System
HWTS.....	Hazardous Waste Tracking System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP..... EDR Proprietary Manufactured Gas Plants

EXECUTIVE SUMMARY

EDR Hist Auto..... EDR Exclusive Historical Auto Stations
EDR Hist Cleaner..... EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF..... Recovered Government Archive Solid Waste Facilities List
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

CIWQS: The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

A review of the CIWQS list, as provided by EDR, and dated 03/02/2020 has revealed that there is 1 CIWQS site within approximately 0.001 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
	MODJESKA CANYON ROAD	0 - 1/8 (0.000 mi.)	A1	9

CERS: The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

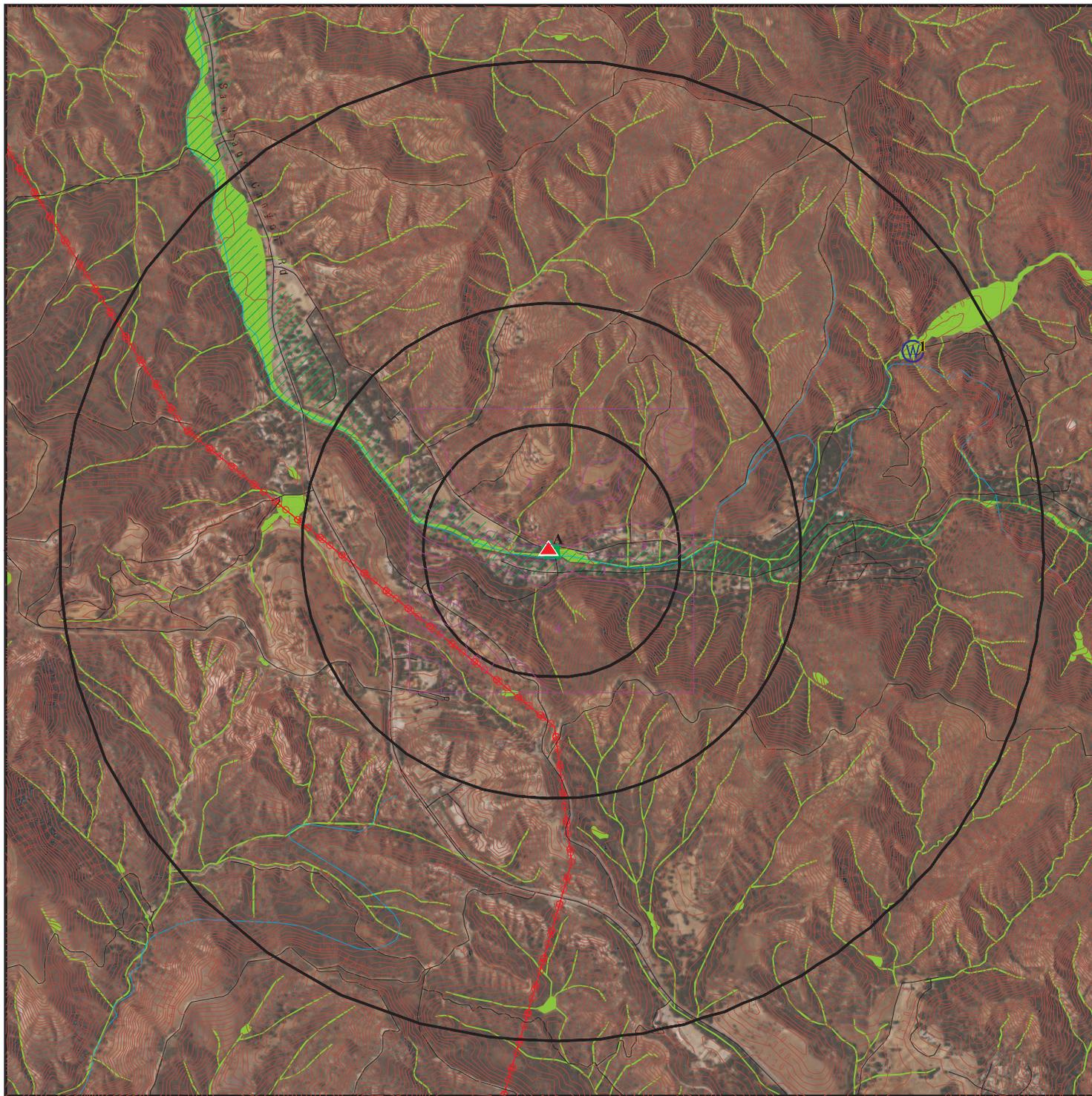
A review of the CERS list, as provided by EDR, and dated 01/21/2020 has revealed that there is 1 CERS site within approximately 0.001 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
	MODJESKA CANYON ROAD	0 - 1/8 (0.000 mi.)	A2	10

EXECUTIVE SUMMARY

There were no unmapped sites in this report.

OVERVIEW MAP - 6098671.2S



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  National Priority List Sites
-  Dept. Defense Sites
-  Indian Reservations BIA
-  Power transmission lines
-  Special Flood Hazard Area (1%)
-  0.2% Annual Chance Flood Hazard
-  National Wetland Inventory
-  State Wetlands
-  Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Modjeska Canyon Road
 ADDRESS: Modjeska Canyon Road
 Silverado CA 92676
 LAT/LONG: 33.70875 / 117.636334

CLIENT: WRECO
 CONTACT: Joseph Mcconnell
 INQUIRY #: 6098671.2s
 DATE: June 19, 2020 7:04 pm

DETAIL MAP - 6098671.2S



Target Property

Sites at elevations higher than or equal to the target property

Sites at elevations lower than the target property

Manufactured Gas Plants

Sensitive Receptors

National Priority List Sites

Dept. Defense Sites

Indian Reservations BIA

Power transmission lines

Special Flood Hazard Area (1%)

0.2% Annual Chance Flood Hazard

National Wetland Inventory

State Wetlands

Areas of Concern



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Modjeska Canyon Road
 ADDRESS: Modjeska Canyon Road
 Silverado CA 92676
 LAT/LONG: 33.70875 / 117.636334

CLIENT: WRECO
 CONTACT: Joseph Mcconnell
 INQUIRY #: 6098671.2s
 DATE: June 19, 2020 7:05 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Federal NPL site list</i>								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
<i>Federal Delisted NPL site list</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Federal CERCLIS list</i>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
<i>Federal CERCLIS NFRAP site list</i>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<i>Federal RCRA CORRACTS facilities list</i>								
CORRACTS	1.000		0	0	0	0	NR	0
<i>Federal RCRA non-CORRACTS TSD facilities list</i>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<i>Federal RCRA generators list</i>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROLS	0.500		0	0	0	NR	NR	0
<i>Federal ERNS list</i>								
ERNS	0.001		0	NR	NR	NR	NR	0
<i>State- and tribal - equivalent NPL RESPONSE</i>								
RESPONSE	1.000		0	0	0	0	NR	0
<i>State- and tribal - equivalent CERCLIS ENVIROSTOR</i>								
ENVIROSTOR	1.000		0	0	0	0	NR	0
<i>State and tribal landfill and/or solid waste disposal site lists</i>								
SWF/LF	0.500		0	0	0	NR	NR	0
<i>State and tribal leaking storage tank lists</i>								
LUST	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
CERS HAZ WASTE	0.250		0	0	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.500		0	0	0	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
Orange Co. Industrial Site	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		0	NR	NR	NR	NR	0
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		0	NR	NR	NR	NR	0
PADS	0.001		0	NR	NR	NR	NR	0
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001		1	NR	NR	NR	NR	1
CERS	0.001		1	NR	NR	NR	NR	1
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
MINES MRDS	0.001		0	NR	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0

- Totals --		0	2	0	0	0	0	2
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MAP FINDINGS SUMMARY

<u>Database</u>	<u>Search Distance (Miles)</u>	<u>Target Property</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
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NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s) EDR ID Number
EPA ID Number

A1 MODJESKA CANYON ROAD BRIDGE

CIWQS S121656418
N/A

< 1/8
1 ft. ORANGE (County), CA 92676

Site 1 of 2 in cluster A

Relative:
Higher

Actual:
1279 ft.

CIWQS:

Name: MODJESKA CANYON ROAD BRIDGE
Address: Not reported
City,State,Zip: CA 92676
Agency: Orange Cnty Public Works
Agency Address: Po Box 4048, Santa Ana, CA 92702-4048
Place/Project Type: Dredge/Fill Site
SIC/NAICS: Not reported
Region: 8
Program: CERFILLEXC
Regulatory Measure Status: Historical
Regulatory Measure Type: Enrollee - 401 Certification
Order Number: RGP 63
WDID: Not reported
NPDES Number: Not reported
Adoption Date: Not reported
Effective Date: 01/25/2010
Termination Date: 01/25/2010
Expiration/Review Date: 10/31/2013
Design Flow: Not reported
Major/Minor: Not reported
Complexity: Not reported
TTWQ: Not reported
Enforcement Actions within 5 years: 0
Violations within 5 years: 0
Latitude: 33.70885
Longitude: -117.63642

Name: MODJESKA CANYON ROAD BRIDGE REPAIR OVER SANTIAGO CREEK
Address: Not reported
City,State,Zip: CA
Agency: Orange Cnty Public Works
Agency Address: Po Box 4048, Santa Ana, CA 92702-4048
Place/Project Type: Dredge/Fill Site
SIC/NAICS: Not reported
Region: 8
Program: CERFILLEXC
Regulatory Measure Status: Historical
Regulatory Measure Type: 401 Certification
Order Number: Not reported
WDID: Not reported
NPDES Number: Not reported
Adoption Date: 09/29/2011
Effective Date: 09/29/2011
Termination Date: 09/27/2016
Expiration/Review Date: Not reported
Design Flow: Not reported
Major/Minor: Not reported
Complexity: Not reported
TTWQ: Not reported
Enforcement Actions within 5 years: 0
Violations within 5 years: 0
Latitude: Not reported

MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Site

Database(s)

EDR ID Number
 EPA ID Number

MODJESKA CANYON ROAD BRIDGE (Continued)

S121656418

Longitude: Not reported

A2

MODJESKA CANYON ROAD BRIDGE

CERS

S123508962

< 1/8
 1 ft.

, CA 92676

N/A

Site 2 of 2 in cluster A

**Relative:
 Higher**

CERS:

**Actual:
 1279 ft.**

Name:

MODJESKA CANYON ROAD BRIDGE

Address:

Not reported

City,State,Zip:

CA 92676

Site ID:

321471

CERS ID:

785120

CERS Description:

Wetlands - Fill and Dredge Material

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Count: 0 records.

ORPHAN SUMMARY

<u>City</u>	<u>EDR ID</u>	<u>Site Name</u>	<u>Site Address</u>	<u>Zip</u>	<u>Database(s)</u>
NO SITES FOUND					

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GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/27/2020	Source: EPA
Date Data Arrived at EDR: 05/06/2020	Telephone: N/A
Date Made Active in Reports: 05/28/2020	Last EDR Contact: 06/03/2020
Number of Days to Update: 22	Next Scheduled EDR Contact: 07/13/2020
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/27/2020	Source: EPA
Date Data Arrived at EDR: 05/06/2020	Telephone: N/A
Date Made Active in Reports: 05/28/2020	Last EDR Contact: 06/03/2020
Number of Days to Update: 22	Next Scheduled EDR Contact: 07/13/2020
	Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: EPA
Telephone: N/A
Last EDR Contact: 06/03/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/05/2019
Date Made Active in Reports: 05/14/2019
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/03/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/03/2020
Next Scheduled EDR Contact: 07/27/2020
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 04/27/2020	Source: EPA
Date Data Arrived at EDR: 05/06/2020	Telephone: 800-424-9346
Date Made Active in Reports: 05/28/2020	Last EDR Contact: 06/03/2020
Number of Days to Update: 22	Next Scheduled EDR Contact: 07/27/2020
	Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/23/2020	Source: EPA
Date Data Arrived at EDR: 03/25/2020	Telephone: 800-424-9346
Date Made Active in Reports: 05/21/2020	Last EDR Contact: 03/25/2020
Number of Days to Update: 57	Next Scheduled EDR Contact: 07/06/2020
	Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/23/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/25/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 05/21/2020	Last EDR Contact: 03/25/2020
Number of Days to Update: 57	Next Scheduled EDR Contact: 07/06/2020
	Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/23/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/25/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 05/21/2020	Last EDR Contact: 03/25/2020
Number of Days to Update: 57	Next Scheduled EDR Contact: 07/06/2020
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/23/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/25/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 05/21/2020	Last EDR Contact: 03/25/2020
Number of Days to Update: 57	Next Scheduled EDR Contact: 07/06/2020
	Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/23/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/25/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 05/21/2020	Last EDR Contact: 03/25/2020
Number of Days to Update: 57	Next Scheduled EDR Contact: 07/06/2020
	Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/15/2020	Source: Department of the Navy
Date Data Arrived at EDR: 05/19/2020	Telephone: 843-820-7326
Date Made Active in Reports: 06/18/2020	Last EDR Contact: 05/14/2020
Number of Days to Update: 30	Next Scheduled EDR Contact: 08/24/2020
	Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/13/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/20/2020	Telephone: 703-603-0695
Date Made Active in Reports: 05/15/2020	Last EDR Contact: 05/15/2020
Number of Days to Update: 85	Next Scheduled EDR Contact: 09/07/2020
	Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/13/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/20/2020	Telephone: 703-603-0695
Date Made Active in Reports: 05/15/2020	Last EDR Contact: 05/15/2020
Number of Days to Update: 85	Next Scheduled EDR Contact: 09/07/2020
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/22/2020

Date Data Arrived at EDR: 03/24/2020

Date Made Active in Reports: 06/18/2020

Number of Days to Update: 86

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180

Last EDR Contact: 03/24/2020

Next Scheduled EDR Contact: 07/06/2020

Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity.

These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 01/27/2020

Date Data Arrived at EDR: 01/28/2020

Date Made Active in Reports: 04/09/2020

Number of Days to Update: 72

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 04/28/2020

Next Scheduled EDR Contact: 08/10/2020

Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 01/27/2020

Date Data Arrived at EDR: 01/28/2020

Date Made Active in Reports: 04/09/2020

Number of Days to Update: 72

Source: Department of Toxic Substances Control

Telephone: 916-323-3400

Last EDR Contact: 04/28/2020

Next Scheduled EDR Contact: 08/10/2020

Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/10/2020

Date Data Arrived at EDR: 02/11/2020

Date Made Active in Reports: 04/20/2020

Number of Days to Update: 69

Source: Department of Resources Recycling and Recovery

Telephone: 916-341-6320

Last EDR Contact: 05/12/2020

Next Scheduled EDR Contact: 08/24/2020

Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/01/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/20/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 10/02/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 05/20/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/01/2019	Source: EPA, Region 5
Date Data Arrived at EDR: 12/04/2019	Telephone: 312-886-7439
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/15/2019	Source: EPA Region 7
Date Data Arrived at EDR: 12/17/2019	Telephone: 913-551-7003
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 55	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/10/2019	Source: EPA Region 4
Date Data Arrived at EDR: 12/05/2019	Telephone: 404-562-8677
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 67	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/11/2019	Source: EPA Region 10
Date Data Arrived at EDR: 12/04/2019	Telephone: 206-553-2857
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/04/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/04/2019	Telephone: 415-972-3372
Date Made Active in Reports: 02/27/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 85	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/03/2019	Source: EPA Region 8
Date Data Arrived at EDR: 12/04/2019	Telephone: 303-312-6271
Date Made Active in Reports: 02/14/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 72	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 05/13/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 05/13/2020	Telephone: 866-480-1028
Date Made Active in Reports: 05/14/2020	Last EDR Contact: 06/09/2020
Number of Days to Update: 1	Next Scheduled EDR Contact: 09/21/2020
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 02/01/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 03/19/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 03/09/2020
Date Data Arrived at EDR: 03/10/2020
Date Made Active in Reports: 05/20/2020
Number of Days to Update: 71

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 03/09/2020
Date Data Arrived at EDR: 03/11/2020
Date Made Active in Reports: 05/26/2020
Number of Days to Update: 76

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 06/10/2020
Next Scheduled EDR Contact: 09/28/2020
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/03/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/14/2020
Number of Days to Update: 72

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 05/20/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 10/02/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 05/20/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 10/11/2019
Date Data Arrived at EDR: 12/04/2019
Date Made Active in Reports: 02/10/2020
Number of Days to Update: 68

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/20/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/11/2019	Source: EPA Region 10
Date Data Arrived at EDR: 12/04/2019	Telephone: 206-553-2857
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/01/2019	Source: EPA Region 5
Date Data Arrived at EDR: 12/04/2019	Telephone: 312-886-6136
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/10/2019	Source: EPA Region 4
Date Data Arrived at EDR: 12/05/2019	Telephone: 404-562-9424
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 67	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/04/2019	Source: EPA Region 9
Date Data Arrived at EDR: 12/04/2019	Telephone: 415-972-3368
Date Made Active in Reports: 02/27/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 85	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/01/2019	Source: EPA, Region 1
Date Data Arrived at EDR: 12/04/2019	Telephone: 617-918-1313
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 05/20/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/27/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/09/2020
Number of Days to Update: 72

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/28/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 06/17/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfields Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 03/23/2020
Date Data Arrived at EDR: 03/24/2020
Date Made Active in Reports: 06/05/2020
Number of Days to Update: 73

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/24/2020
Next Scheduled EDR Contact: 07/06/2020
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/01/2020
Date Data Arrived at EDR: 06/02/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/02/2020
Next Scheduled EDR Contact: 09/28/2020
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 04/16/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 03/09/2020
Date Data Arrived at EDR: 03/10/2020
Date Made Active in Reports: 05/19/2020
Number of Days to Update: 70

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 11/15/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/23/2020
Number of Days to Update: 69

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 08/24/2020
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 04/16/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 05/01/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 03/18/2020	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 03/19/2020	Telephone: 202-307-1000
Date Made Active in Reports: 06/09/2020	Last EDR Contact: 05/18/2020
Number of Days to Update: 82	Next Scheduled EDR Contact: 09/07/2020
	Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 08/03/2006	Telephone: 916-323-3400
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 02/23/2009
Number of Days to Update: 21	Next Scheduled EDR Contact: 05/25/2009
	Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 01/27/2020	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 01/28/2020	Telephone: 916-323-3400
Date Made Active in Reports: 04/09/2020	Last EDR Contact: 04/28/2020
Number of Days to Update: 72	Next Scheduled EDR Contact: 08/10/2020
	Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2018	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 02/05/2020	Telephone: 916-255-6504
Date Made Active in Reports: 04/15/2020	Last EDR Contact: 05/14/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 07/20/2020
	Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995	Source: State Water Resources Control Board
Date Data Arrived at EDR: 08/30/1995	Telephone: 916-227-4364
Date Made Active in Reports: 09/26/1995	Last EDR Contact: 01/26/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 04/27/2009
	Data Release Frequency: No Update Planned

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/21/2020
Date Data Arrived at EDR: 01/22/2020
Date Made Active in Reports: 04/01/2020
Number of Days to Update: 70

Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 04/21/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 03/18/2020
Date Data Arrived at EDR: 03/19/2020
Date Made Active in Reports: 06/09/2020
Number of Days to Update: 82

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/18/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 03/09/2020
Date Data Arrived at EDR: 03/10/2020
Date Made Active in Reports: 05/19/2020
Number of Days to Update: 70

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 12/19/2019
Date Data Arrived at EDR: 12/23/2019
Date Made Active in Reports: 02/21/2020
Number of Days to Update: 60

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 08/01/2019
Date Data Arrived at EDR: 08/02/2019
Date Made Active in Reports: 10/11/2019
Number of Days to Update: 70

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 04/23/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Varies

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 01/21/2020
Date Data Arrived at EDR: 01/22/2020
Date Made Active in Reports: 04/01/2020
Number of Days to Update: 70

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/21/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Quarterly

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 03/03/2020
Date Data Arrived at EDR: 03/05/2020
Date Made Active in Reports: 05/14/2020
Number of Days to Update: 70

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 05/27/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 06/03/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/02/2020	Source: DTSC and SWRCB
Date Data Arrived at EDR: 03/03/2020	Telephone: 916-323-3400
Date Made Active in Reports: 05/13/2020	Last EDR Contact: 06/02/2020
Number of Days to Update: 71	Next Scheduled EDR Contact: 09/14/2020
	Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 02/27/2020	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 03/24/2020	Telephone: 202-366-4555
Date Made Active in Reports: 06/18/2020	Last EDR Contact: 03/24/2020
Number of Days to Update: 86	Next Scheduled EDR Contact: 07/06/2020
	Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 12/24/2019	Source: Office of Emergency Services
Date Data Arrived at EDR: 01/22/2020	Telephone: 916-845-8400
Date Made Active in Reports: 03/30/2020	Last EDR Contact: 04/21/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 05/13/2020	Source: State Water Quality Control Board
Date Data Arrived at EDR: 05/13/2020	Telephone: 866-480-1028
Date Made Active in Reports: 05/14/2020	Last EDR Contact: 06/09/2020
Number of Days to Update: 1	Next Scheduled EDR Contact: 09/21/2020
	Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 05/13/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 05/13/2020	Telephone: 866-480-1028
Date Made Active in Reports: 05/15/2020	Last EDR Contact: 06/09/2020
Number of Days to Update: 2	Next Scheduled EDR Contact: 09/21/2020
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/22/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 50	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/23/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/25/2020	Telephone: (415) 495-8895
Date Made Active in Reports: 05/21/2020	Last EDR Contact: 03/25/2020
Number of Days to Update: 57	Next Scheduled EDR Contact: 07/06/2020
	Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/28/2020	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 02/19/2020	Telephone: 202-528-4285
Date Made Active in Reports: 05/14/2020	Last EDR Contact: 05/18/2020
Number of Days to Update: 85	Next Scheduled EDR Contact: 08/31/2020
	Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 04/10/2020
Number of Days to Update: 62	Next Scheduled EDR Contact: 07/20/2020
	Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018	Source: U.S. Geological Survey
Date Data Arrived at EDR: 04/11/2018	Telephone: 888-275-8747
Date Made Active in Reports: 11/06/2019	Last EDR Contact: 04/06/2020
Number of Days to Update: 574	Next Scheduled EDR Contact: 07/20/2020
	Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 08/24/2020
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/23/2020
Date Data Arrived at EDR: 03/24/2020
Date Made Active in Reports: 06/18/2020
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/24/2020
Next Scheduled EDR Contact: 07/06/2020
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/04/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/08/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/17/2020
Next Scheduled EDR Contact: 09/28/2020
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 79

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/21/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 05/01/2019
Date Data Arrived at EDR: 10/23/2019
Date Made Active in Reports: 01/15/2020
Number of Days to Update: 84

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/21/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 06/03/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 11/05/2019
Date Data Arrived at EDR: 11/20/2019
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 149

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/15/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/27/2020	Source: EPA
Date Data Arrived at EDR: 05/06/2020	Telephone: 202-564-6023
Date Made Active in Reports: 06/09/2020	Last EDR Contact: 06/03/2020
Number of Days to Update: 34	Next Scheduled EDR Contact: 08/17/2020
	Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 10/09/2019	Source: EPA
Date Data Arrived at EDR: 10/11/2019	Telephone: 202-566-0500
Date Made Active in Reports: 12/20/2019	Last EDR Contact: 04/10/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 07/20/2020
	Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 03/26/2020
Number of Days to Update: 79	Next Scheduled EDR Contact: 07/20/2020
	Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/25/2019	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 10/25/2019	Telephone: 301-415-7169
Date Made Active in Reports: 01/15/2020	Last EDR Contact: 04/10/2020
Number of Days to Update: 82	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2018	Source: Department of Energy
Date Data Arrived at EDR: 12/04/2019	Telephone: 202-586-8719
Date Made Active in Reports: 01/15/2020	Last EDR Contact: 06/05/2020
Number of Days to Update: 42	Next Scheduled EDR Contact: 09/14/2020
	Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/05/2019	Telephone: N/A
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 06/01/2020
Number of Days to Update: 251	Next Scheduled EDR Contact: 09/14/2020
	Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/06/2019	Telephone: 202-566-0517
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 05/08/2020
Number of Days to Update: 96	Next Scheduled EDR Contact: 08/17/2020
	Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/01/2019	Telephone: 202-343-9775
Date Made Active in Reports: 09/23/2019	Last EDR Contact: 07/01/2019
Number of Days to Update: 84	Next Scheduled EDR Contact: 07/13/2020
	Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/17/2020
Number of Days to Update: 80

Source: Department of Transportation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 04/28/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 01/17/2020
Date Made Active in Reports: 03/06/2020
Number of Days to Update: 49

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 03/26/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 03/25/2020
Next Scheduled EDR Contact: 07/06/2020
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/10/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 04/29/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/18/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 04/27/2020
Date Data Arrived at EDR: 05/06/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 22

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 06/03/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust.

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 03/31/2020
Date Data Arrived at EDR: 04/01/2020
Date Made Active in Reports: 05/21/2020
Number of Days to Update: 50

Source: DOL, Mine Safety & Health Administration
Telephone: 202-693-9424
Last EDR Contact: 05/27/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/11/2020
Date Data Arrived at EDR: 02/25/2020
Date Made Active in Reports: 05/21/2020
Number of Days to Update: 86

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/21/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 01/16/2018
Date Data Arrived at EDR: 02/28/2020
Date Made Active in Reports: 05/22/2020
Number of Days to Update: 84

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/27/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/21/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/05/2020
Date Data Arrived at EDR: 03/06/2020
Date Made Active in Reports: 05/29/2020
Number of Days to Update: 84

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/03/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/03/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/28/2020
Number of Days to Update: 86

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 06/02/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 01/17/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 74

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/03/2020
Next Scheduled EDR Contact: 07/27/2020
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/26/2018	Telephone: 202-564-0527
Date Made Active in Reports: 10/05/2018	Last EDR Contact: 05/18/2020
Number of Days to Update: 71	Next Scheduled EDR Contact: 09/07/2020
	Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 01/05/2020	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/07/2020	Telephone: 202-564-2280
Date Made Active in Reports: 03/06/2020	Last EDR Contact: 04/07/2020
Number of Days to Update: 59	Next Scheduled EDR Contact: 07/20/2020
	Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/18/2020	Source: EPA
Date Data Arrived at EDR: 02/19/2020	Telephone: 800-385-6164
Date Made Active in Reports: 05/14/2020	Last EDR Contact: 05/19/2020
Number of Days to Update: 85	Next Scheduled EDR Contact: 08/31/2020
	Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989	Source: Department of Health Services
Date Data Arrived at EDR: 07/27/1994	Telephone: 916-255-2118
Date Made Active in Reports: 08/02/1994	Last EDR Contact: 05/31/1994
Number of Days to Update: 6	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 03/23/2020	Source: CAL EPA/Office of Emergency Information
Date Data Arrived at EDR: 03/24/2020	Telephone: 916-323-3400
Date Made Active in Reports: 06/05/2020	Last EDR Contact: 03/24/2020
Number of Days to Update: 73	Next Scheduled EDR Contact: 07/06/2020
	Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 05/01/2019	Source: Livermore-Pleasanton Fire Department
Date Data Arrived at EDR: 05/14/2019	Telephone: 925-454-2361
Date Made Active in Reports: 07/17/2019	Last EDR Contact: 05/15/2020
Number of Days to Update: 64	Next Scheduled EDR Contact: 08/24/2020
	Data Release Frequency: Varies

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/03/2020
Date Data Arrived at EDR: 02/04/2020
Date Made Active in Reports: 04/09/2020
Number of Days to Update: 65

Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 04/23/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Varies

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 02/27/2020
Date Data Arrived at EDR: 02/28/2020
Date Made Active in Reports: 05/07/2020
Number of Days to Update: 69

Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 05/27/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 12/04/2019
Date Data Arrived at EDR: 01/29/2020
Date Made Active in Reports: 04/09/2020
Number of Days to Update: 71

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 05/27/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Annually

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 03/25/2020
Date Data Arrived at EDR: 03/26/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 81

Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Varies

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/24/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 59

Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 06/16/2020
Next Scheduled EDR Contact: 09/28/2020
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 04/03/2020
Date Data Arrived at EDR: 04/07/2020
Date Made Active in Reports: 04/15/2020
Number of Days to Update: 8

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/03/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 01/21/2020
Date Data Arrived at EDR: 01/23/2020
Date Made Active in Reports: 04/01/2020
Number of Days to Update: 69

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/19/2020	Source: California Integrated Waste Management Board
Date Data Arrived at EDR: 02/20/2020	Telephone: 916-341-6066
Date Made Active in Reports: 04/24/2020	Last EDR Contact: 04/29/2020
Number of Days to Update: 64	Next Scheduled EDR Contact: 08/24/2020
	Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2017	Source: California Environmental Protection Agency
Date Data Arrived at EDR: 05/29/2019	Telephone: 916-255-1136
Date Made Active in Reports: 07/22/2019	Last EDR Contact: 04/15/2020
Number of Days to Update: 54	Next Scheduled EDR Contact: 07/20/2020
	Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 02/18/2020	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 02/19/2020	Telephone: 877-786-9427
Date Made Active in Reports: 04/24/2020	Last EDR Contact: 05/18/2020
Number of Days to Update: 65	Next Scheduled EDR Contact: 08/31/2020
	Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 01/22/2009	Telephone: 916-323-3400
Date Made Active in Reports: 04/08/2009	Last EDR Contact: 01/22/2009
Number of Days to Update: 76	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/18/2020	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 02/19/2020	Telephone: 916-323-3400
Date Made Active in Reports: 04/24/2020	Last EDR Contact: 05/18/2020
Number of Days to Update: 65	Next Scheduled EDR Contact: 08/31/2020
	Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 01/06/2020	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 01/07/2020	Telephone: 916-440-7145
Date Made Active in Reports: 03/05/2020	Last EDR Contact: 04/09/2020
Number of Days to Update: 58	Next Scheduled EDR Contact: 07/20/2020
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 03/09/2020	Source: Department of Conservation
Date Data Arrived at EDR: 03/10/2020	Telephone: 916-322-1080
Date Made Active in Reports: 05/19/2020	Last EDR Contact: 06/09/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 09/21/2020
	Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 02/12/2020	Source: Department of Public Health
Date Data Arrived at EDR: 03/03/2020	Telephone: 916-558-1784
Date Made Active in Reports: 05/14/2020	Last EDR Contact: 06/02/2020
Number of Days to Update: 72	Next Scheduled EDR Contact: 09/14/2020
	Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 02/10/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 02/11/2020	Telephone: 916-445-9379
Date Made Active in Reports: 04/20/2020	Last EDR Contact: 05/12/2020
Number of Days to Update: 69	Next Scheduled EDR Contact: 08/24/2020
	Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 03/02/2020	Source: Department of Pesticide Regulation
Date Data Arrived at EDR: 03/03/2020	Telephone: 916-445-4038
Date Made Active in Reports: 05/14/2020	Last EDR Contact: 06/02/2020
Number of Days to Update: 72	Next Scheduled EDR Contact: 09/14/2020
	Data Release Frequency: Quarterly

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 03/09/2020	Source: Department of Conservation
Date Data Arrived at EDR: 03/10/2020	Telephone: 916-323-3836
Date Made Active in Reports: 05/19/2020	Last EDR Contact: 06/09/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 09/21/2020
	Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 03/12/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/13/2020	Telephone: 916-445-3846
Date Made Active in Reports: 05/21/2020	Last EDR Contact: 06/10/2020
Number of Days to Update: 69	Next Scheduled EDR Contact: 09/28/2020
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 03/09/2020	Source: Department of Conservation
Date Data Arrived at EDR: 03/10/2020	Telephone: 916-445-2408
Date Made Active in Reports: 05/19/2020	Last EDR Contact: 06/09/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 09/21/2020
	Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 05/13/2020	Source: State Water Resource Control Board
Date Data Arrived at EDR: 05/13/2020	Telephone: 866-480-1028
Date Made Active in Reports: 05/15/2020	Last EDR Contact: 06/09/2020
Number of Days to Update: 2	Next Scheduled EDR Contact: 09/21/2020
	Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 11/19/2019	Source: RWQCB, Central Valley Region
Date Data Arrived at EDR: 01/07/2020	Telephone: 559-445-5577
Date Made Active in Reports: 03/09/2020	Last EDR Contact: 04/10/2020
Number of Days to Update: 62	Next Scheduled EDR Contact: 07/20/2020
	Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007	Source: State Water Resources Control Board
Date Data Arrived at EDR: 06/20/2007	Telephone: 916-341-5227
Date Made Active in Reports: 06/29/2007	Last EDR Contact: 05/07/2020
Number of Days to Update: 9	Next Scheduled EDR Contact: 08/31/2020
	Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009	Source: Los Angeles Water Quality Control Board
Date Data Arrived at EDR: 07/21/2009	Telephone: 213-576-6726
Date Made Active in Reports: 08/03/2009	Last EDR Contact: 06/17/2020
Number of Days to Update: 13	Next Scheduled EDR Contact: 10/05/2020
	Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 05/13/2020	Source: State Water Resources Control Board
Date Data Arrived at EDR: 05/13/2020	Telephone: 866-480-1028
Date Made Active in Reports: 05/15/2020	Last EDR Contact: 06/09/2020
Number of Days to Update: 2	Next Scheduled EDR Contact: 09/21/2020
	Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)

Projects sites

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 03/09/2020
Date Data Arrived at EDR: 03/10/2020
Date Made Active in Reports: 05/19/2020
Number of Days to Update: 70

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 03/02/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/13/2020
Number of Days to Update: 71

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 06/02/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 01/21/2020
Date Data Arrived at EDR: 01/22/2020
Date Made Active in Reports: 04/01/2020
Number of Days to Update: 70

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/21/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 05/13/2020
Date Data Arrived at EDR: 05/13/2020
Date Made Active in Reports: 05/15/2020
Number of Days to Update: 2

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/09/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Varies

PCS ENF: Enforcement data

No description is available for this data

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 02/05/2015
Date Made Active in Reports: 03/06/2015
Number of Days to Update: 29

Source: EPA
Telephone: 202-564-2497
Last EDR Contact: 03/26/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System

The Hazardous Waste Tracking System (HWTS) is the Department of Toxic Substances Control's data repository for hazardous waste Identification (ID) numbers and manifest information. HWTS generates reports on hazardous waste shipments for generators, transporters, and TSDFs.

Date of Government Version: 10/15/2019
Date Data Arrived at EDR: 11/14/2019
Date Made Active in Reports: 02/07/2020
Number of Days to Update: 85

Source: Department of Toxic Substances Control
Telephone: 916-324-2444
Last EDR Contact: 03/26/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011
Date Data Arrived at EDR: 08/05/2011
Date Made Active in Reports: 09/29/2011
Number of Days to Update: 55

Source: EPA, Office of Water
Telephone: 202-564-2496
Last EDR Contact: 06/08/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

MINES MRDS: Mineral Resources Data System Mineral Resources Data System

Date of Government Version: 04/06/2018
Date Data Arrived at EDR: 10/21/2019
Date Made Active in Reports: 10/24/2019
Number of Days to Update: 3

Source: USGS
Telephone: 703-648-6533
Last EDR Contact: 05/21/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: Varies

PCS INACTIVE: Listing of Inactive PCS Permits

An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/26/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Semi-Annually

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/26/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 01/06/2020
Date Data Arrived at EDR: 01/07/2020
Date Made Active in Reports: 03/06/2020
Number of Days to Update: 59

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/20/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA AMADOR: CUPA Facility List Cupa Facility List

Date of Government Version: 05/18/2020
Date Data Arrived at EDR: 05/19/2020
Date Made Active in Reports: 06/01/2020
Number of Days to Update: 13

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 05/18/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 03/26/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing Cupa Facility Listing

Date of Government Version: 03/27/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 76

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 06/17/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List Cupa facility list.

Date of Government Version: 03/02/2020
Date Data Arrived at EDR: 03/04/2020
Date Made Active in Reports: 06/01/2020
Number of Days to Update: 89

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 04/06/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 02/14/2020
Date Data Arrived at EDR: 02/18/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 66

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 04/16/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA DEL NORTE: CUPA Facility List Cupa Facility list

Date of Government Version: 12/27/2019
Date Data Arrived at EDR: 01/28/2020
Date Made Active in Reports: 04/09/2020
Number of Days to Update: 72

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 04/16/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List CUPA facility list.

Date of Government Version: 12/31/2019
Date Data Arrived at EDR: 01/03/2020
Date Made Active in Reports: 03/05/2020
Number of Days to Update: 62

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 01/10/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 76

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 03/31/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List CUPA facility list.

Date of Government Version: 05/19/2020
Date Data Arrived at EDR: 05/20/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 26

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 05/14/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA IMPERIAL: CUPA Facility List Cupa facility list.

Date of Government Version: 01/21/2020
Date Data Arrived at EDR: 01/23/2020
Date Made Active in Reports: 03/30/2020
Number of Days to Update: 67

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Varies

KERN COUNTY:

UST KERN: Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

Date of Government Version: 01/31/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 04/15/2020
Number of Days to Update: 70

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 04/23/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 02/13/2020
Date Data Arrived at EDR: 02/14/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 70

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List Cupa facility list

Date of Government Version: 01/15/2020
Date Data Arrived at EDR: 01/16/2020
Date Made Active in Reports: 04/01/2020
Number of Days to Update: 76

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/13/2020
Next Scheduled EDR Contact: 07/27/2020
Data Release Frequency: Varies

LASSEN COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA LASSEN: CUPA Facility List Cupa facility list

Date of Government Version: 01/30/2020
Date Data Arrived at EDR: 01/31/2020
Date Made Active in Reports: 04/09/2020
Number of Days to Update: 69

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 06/10/2020
Next Scheduled EDR Contact: 09/28/2020
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 03/26/2020
Date Data Arrived at EDR: 03/26/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 81

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 03/26/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities

Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/13/2020
Date Data Arrived at EDR: 01/14/2020
Date Made Active in Reports: 03/24/2020
Number of Days to Update: 70

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/14/2020
Next Scheduled EDR Contact: 07/27/2020
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 01/15/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 51

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/02/2020
Next Scheduled EDR Contact: 07/27/2020
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory

A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/27/2020
Next Scheduled EDR Contact: 07/06/2020
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 04/30/2012	Source: Los Angeles County Department of Public Works
Date Data Arrived at EDR: 04/17/2019	Telephone: 626-458-6973
Date Made Active in Reports: 05/29/2019	Last EDR Contact: 04/17/2020
Number of Days to Update: 42	Next Scheduled EDR Contact: 07/27/2020
	Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/25/2019	Telephone: 213-978-3800
Date Made Active in Reports: 08/22/2019	Last EDR Contact: 03/27/2020
Number of Days to Update: 58	Next Scheduled EDR Contact: 07/06/2020
	Data Release Frequency: Varies

LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 06/01/2019	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 06/25/2019	Telephone: 213-978-3800
Date Made Active in Reports: 08/22/2019	Last EDR Contact: 03/27/2020
Number of Days to Update: 58	Next Scheduled EDR Contact: 07/06/2020
	Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 12/31/2019	Source: Community Health Services
Date Data Arrived at EDR: 01/14/2020	Telephone: 323-890-7806
Date Made Active in Reports: 03/24/2020	Last EDR Contact: 04/14/2020
Number of Days to Update: 70	Next Scheduled EDR Contact: 07/27/2020
	Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017	Source: City of El Segundo Fire Department
Date Data Arrived at EDR: 04/19/2017	Telephone: 310-524-2236
Date Made Active in Reports: 05/10/2017	Last EDR Contact: 04/02/2020
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/27/2020
	Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019	Source: City of Long Beach Fire Department
Date Data Arrived at EDR: 04/23/2019	Telephone: 562-570-2563
Date Made Active in Reports: 06/27/2019	Last EDR Contact: 04/09/2020
Number of Days to Update: 65	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/27/2019	Source: City of Torrance Fire Department
Date Data Arrived at EDR: 07/30/2019	Telephone: 310-618-2973
Date Made Active in Reports: 10/02/2019	Last EDR Contact: 04/09/2020
Number of Days to Update: 64	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 02/24/2020	Source: Madera County Environmental Health
Date Data Arrived at EDR: 02/25/2020	Telephone: 559-675-7823
Date Made Active in Reports: 05/07/2020	Last EDR Contact: 05/07/2020
Number of Days to Update: 72	Next Scheduled EDR Contact: 08/31/2020
	Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018	Source: Public Works Department Waste Management
Date Data Arrived at EDR: 10/04/2018	Telephone: 415-473-6647
Date Made Active in Reports: 11/02/2018	Last EDR Contact: 03/20/2020
Number of Days to Update: 29	Next Scheduled EDR Contact: 07/13/2020
	Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 11/18/2019	Source: Merced County Environmental Health
Date Data Arrived at EDR: 11/20/2019	Telephone: 209-381-1094
Date Made Active in Reports: 01/03/2020	Last EDR Contact: 05/06/2020
Number of Days to Update: 44	Next Scheduled EDR Contact: 08/17/2020
	Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/21/2020	Source: Mono County Health Department
Date Data Arrived at EDR: 03/05/2020	Telephone: 760-932-5580
Date Made Active in Reports: 05/13/2020	Last EDR Contact: 05/15/2020
Number of Days to Update: 69	Next Scheduled EDR Contact: 09/07/2020
	Data Release Frequency: Varies

MONTEREY COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA MONTEREY: CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 11/06/2019
Date Data Arrived at EDR: 11/07/2019
Date Made Active in Reports: 01/08/2020
Number of Days to Update: 62

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 04/13/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List

CUPA facility list.

Date of Government Version: 02/05/2020
Date Data Arrived at EDR: 02/06/2020
Date Made Active in Reports: 04/15/2020
Number of Days to Update: 69

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 05/06/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 04/15/2020
Number of Days to Update: 70

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/04/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 04/15/2020
Number of Days to Update: 70

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/04/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST ORANGE: List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 02/04/2020
Date Made Active in Reports: 04/10/2020
Number of Days to Update: 66

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 05/05/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 03/02/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/13/2020
Number of Days to Update: 71

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 05/27/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List

Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 03/10/2020
Date Data Arrived at EDR: 03/11/2020
Date Made Active in Reports: 05/20/2020
Number of Days to Update: 70

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 02/10/2020
Next Scheduled EDR Contact: 09/28/2020
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 03/10/2020
Date Data Arrived at EDR: 03/11/2020
Date Made Active in Reports: 05/20/2020
Number of Days to Update: 70

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/10/2020
Next Scheduled EDR Contact: 09/28/2020
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/18/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/15/2020
Number of Days to Update: 76

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/31/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 02/24/2020
Date Data Arrived at EDR: 03/31/2020
Date Made Active in Reports: 06/17/2020
Number of Days to Update: 78

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/31/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 02/12/2020
Date Data Arrived at EDR: 02/13/2020
Date Made Active in Reports: 04/23/2020
Number of Days to Update: 70

Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 04/23/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 02/25/2020
Date Data Arrived at EDR: 02/26/2020
Date Made Active in Reports: 05/07/2020
Number of Days to Update: 71

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 04/23/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 03/02/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/13/2020
Number of Days to Update: 71

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 06/02/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/18/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 06/19/2018
Number of Days to Update: 56

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 12/26/2019
Date Data Arrived at EDR: 01/22/2020
Date Made Active in Reports: 04/01/2020
Number of Days to Update: 70

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 05/27/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

LUST SAN FRANCISCO: Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 04/23/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 01/08/2020
Date Data Arrived at EDR: 01/09/2020
Date Made Active in Reports: 03/06/2020
Number of Days to Update: 57

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 04/23/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 06/10/2020
Next Scheduled EDR Contact: 09/28/2020
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA SAN LUIS OBISPO: CUPA Facility List Cupa Facility List.

Date of Government Version: 02/18/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/12/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/03/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List

Cupa facility list

Date of Government Version: 02/14/2020
Date Data Arrived at EDR: 02/19/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 65

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST SANTA CLARA: LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 05/15/2020
Next Scheduled EDR Contact: 09/07/2020
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 04/22/2020
Date Data Arrived at EDR: 04/24/2020
Date Made Active in Reports: 05/07/2020
Number of Days to Update: 13

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 04/23/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List

CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List

Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 05/07/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 05/26/2020
Next Scheduled EDR Contact: 09/13/2020
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 03/02/2020
Date Data Arrived at EDR: 03/04/2020
Date Made Active in Reports: 05/14/2020
Number of Days to Update: 71

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/15/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Quarterly

SONOMA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA SONOMA: Cupa Facility List Cupa Facility list

Date of Government Version: 02/25/2020
Date Data Arrived at EDR: 02/26/2020
Date Made Active in Reports: 03/11/2020
Number of Days to Update: 14

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 06/17/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 01/02/2020
Date Data Arrived at EDR: 01/03/2020
Date Made Active in Reports: 03/05/2020
Number of Days to Update: 62

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 06/17/2020
Next Scheduled EDR Contact: 10/05/2020
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List Cupa facility list

Date of Government Version: 02/04/2020
Date Data Arrived at EDR: 02/05/2020
Date Made Active in Reports: 04/15/2020
Number of Days to Update: 70

Source: Stanislaus County Department of Environmental Protection
Telephone: 209-525-6751
Last EDR Contact: 04/02/2020
Next Scheduled EDR Contact: 07/27/2020
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 01/23/2020
Date Data Arrived at EDR: 03/03/2020
Date Made Active in Reports: 05/08/2020
Number of Days to Update: 66

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 05/27/2020
Next Scheduled EDR Contact: 09/14/2020
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List Cupa facilities

Date of Government Version: 03/16/2020
Date Data Arrived at EDR: 03/17/2020
Date Made Active in Reports: 05/26/2020
Number of Days to Update: 70

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 05/14/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List Cupa facility list

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/21/2020
Date Data Arrived at EDR: 01/23/2020
Date Made Active in Reports: 03/30/2020
Number of Days to Update: 67

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List Cupa program facilities

Date of Government Version: 02/10/2020
Date Data Arrived at EDR: 02/11/2020
Date Made Active in Reports: 04/20/2020
Number of Days to Update: 69

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 05/14/2020
Next Scheduled EDR Contact: 08/17/2020
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Division of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/09/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/26/2019
Date Data Arrived at EDR: 01/24/2020
Date Made Active in Reports: 04/01/2020
Number of Days to Update: 68

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/20/2020
Next Scheduled EDR Contact: 08/03/2020
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/20/2020
Next Scheduled EDR Contact: 07/13/2020
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/29/2020
Next Scheduled EDR Contact: 08/24/2020
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

MED WASTE VENTURA: Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 12/26/2019	Source: Ventura County Resource Management Agency
Date Data Arrived at EDR: 01/24/2020	Telephone: 805-654-2813
Date Made Active in Reports: 04/01/2020	Last EDR Contact: 04/20/2020
Number of Days to Update: 68	Next Scheduled EDR Contact: 08/03/2020
	Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 01/27/2020	Source: Environmental Health Division
Date Data Arrived at EDR: 03/10/2020	Telephone: 805-654-2813
Date Made Active in Reports: 05/20/2020	Last EDR Contact: 06/09/2020
Number of Days to Update: 71	Next Scheduled EDR Contact: 09/21/2020
	Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 03/23/2020	Source: Yolo County Department of Health
Date Data Arrived at EDR: 04/01/2020	Telephone: 530-666-8646
Date Made Active in Reports: 06/17/2020	Last EDR Contact: 03/20/2020
Number of Days to Update: 77	Next Scheduled EDR Contact: 07/13/2020
	Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 01/27/2020	Source: Yuba County Environmental Health Department
Date Data Arrived at EDR: 02/12/2020	Telephone: 530-749-7523
Date Made Active in Reports: 04/23/2020	Last EDR Contact: 04/16/2020
Number of Days to Update: 71	Next Scheduled EDR Contact: 08/10/2020
	Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 01/30/2020	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 01/30/2020	Telephone: 860-424-3375
Date Made Active in Reports: 03/09/2020	Last EDR Contact: 05/12/2020
Number of Days to Update: 39	Next Scheduled EDR Contact: 08/24/2020
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 04/10/2019
Date Made Active in Reports: 05/16/2019
Number of Days to Update: 36

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/10/2020
Next Scheduled EDR Contact: 07/20/2020
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 05/01/2019
Date Made Active in Reports: 06/21/2019
Number of Days to Update: 51

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 04/29/2020
Next Scheduled EDR Contact: 08/10/2020
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/02/2020
Next Scheduled EDR Contact: 07/27/2020
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 10/02/2019
Date Made Active in Reports: 12/10/2019
Number of Days to Update: 69

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/14/2020
Next Scheduled EDR Contact: 08/31/2020
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/04/2020
Next Scheduled EDR Contact: 09/21/2020
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data

Source: Endeavor Business Media

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK[®] - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

MODJESKA CANYON ROAD
MODJESKA CANYON ROAD
SILVERADO, CA 92676

TARGET PROPERTY COORDINATES

Latitude (North):	33.70875 - 33° 42' 31.50"
Longitude (West):	117.636334 - 117° 38' 10.80"
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	441034.3
UTM Y (Meters):	3729851.8
Elevation:	1272 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5636489 EL TORO, CA
Version Date:	2012
East Map:	5636483 SANTIAGO PEAK, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

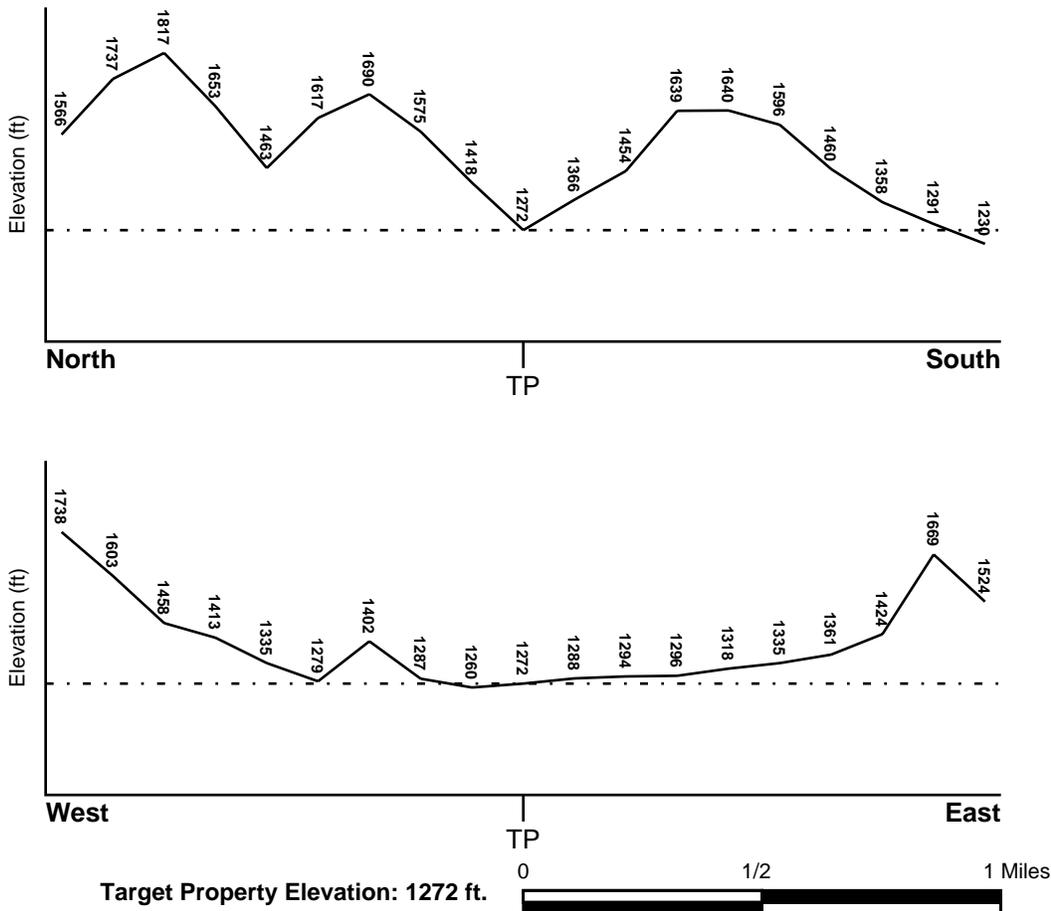
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
06059C0309J	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
06059C0307J	FEMA FIRM Flood data
06059C0326J	FEMA FIRM Flood data
06059C0328J	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
EL TORO	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

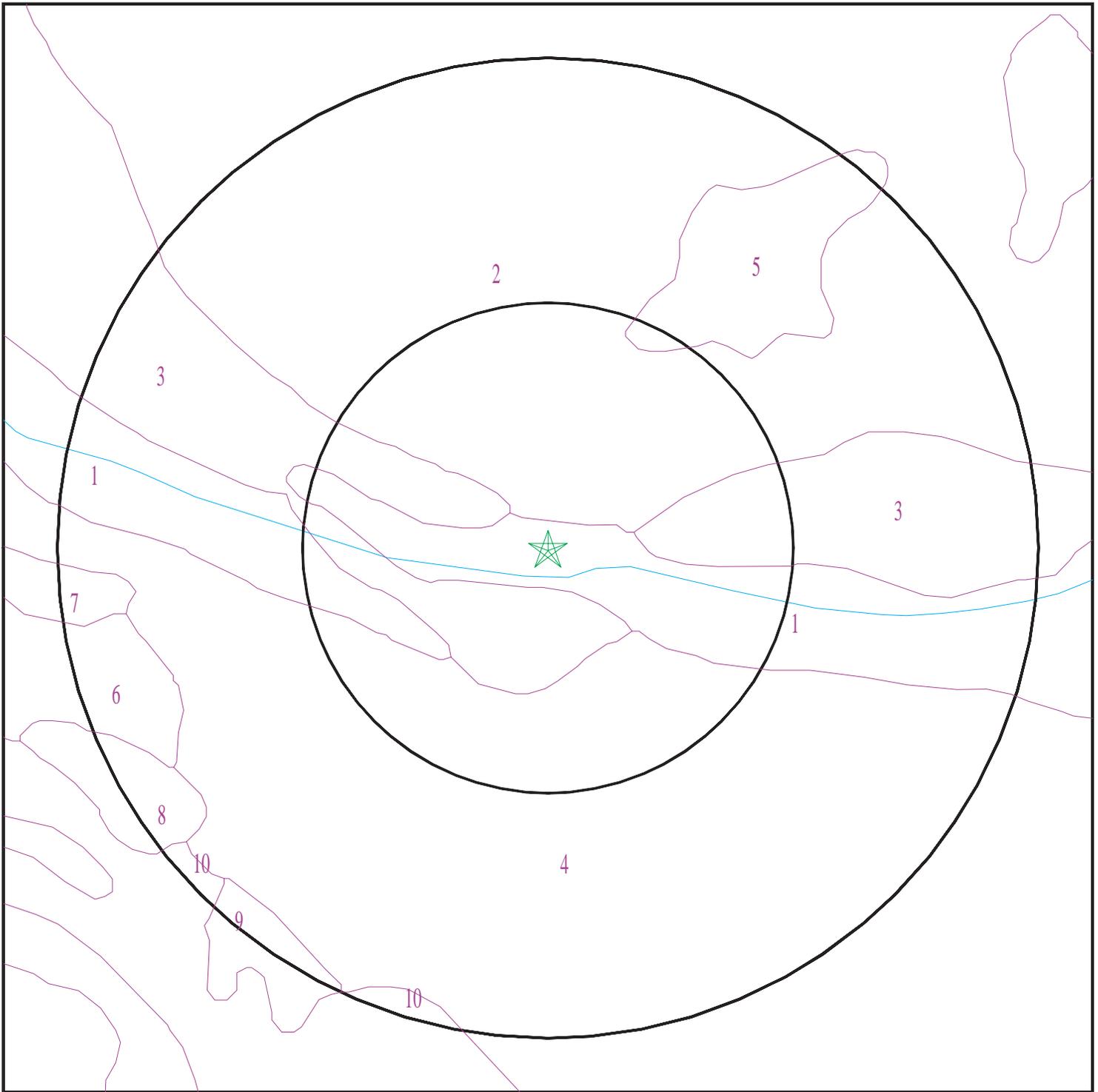
Era: Mesozoic
System: Cretaceous
Series: Upper Cretaceous
Code: uK *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 6098671.2s



- ★ Target Property
- SSURGO Soil
- Water



SITE NAME: Modjeska Canyon Road
ADDRESS: Modjeska Canyon Road
Silverado CA 92676
LAT/LONG: 33.70875 / 117.636334

CLIENT: WRECO
CONTACT: Joseph Mcconnell
INQUIRY #: 6098671.2s
DATE: June 19, 2020 7:05 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: RIVERWASH

Soil Surface Texture: sand

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class:
Hydric Status: All hydric

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 31 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	5 inches	sand	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: Min:
2	5 inches	59 inches	stratified coarse sand to sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: Min:

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 2

Soil Component Name: CIENEBA

Soil Surface Texture: sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	7 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.42 Min: 0	Max: Min:
2	7 inches	11 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.42 Min: 0	Max: Min:

Soil Map ID: 3

Soil Component Name: SORRENTO

Soil Surface Texture: loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	11 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 8.4 Min: 7.9
2	11 inches	61 inches	silty clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 8.4 Min: 7.9
3	61 inches	72 inches	stratified loamy fine sand to silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 8.4 Min: 7.9

Soil Map ID: 4

Soil Component Name: CALLEGUAS

Soil Surface Texture: clay loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	14 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 1.4 Min: 0	Max: Min:
2	14 inches	18 inches	weathered bedrock	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 1.4 Min: 0	Max: Min:

Soil Map ID: 5

Soil Component Name: ANAHEIM

Soil Surface Texture: clay loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	25 inches	clay loam	Not reported	Not reported	Max: Min:	Max: Min:
2	25 inches	29 inches	weathered bedrock	Not reported	Not reported	Max: Min:	Max: Min:

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 6

Soil Component Name: SOPER

Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	loam	Not reported	Not reported	Max: Min:	Max: Min:
2	9 inches	29 inches	gravelly clay loam	Not reported	Not reported	Max: Min:	Max: Min:
3	29 inches	33 inches	weathered bedrock	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 7

Soil Component Name: MYFORD

Soil Surface Texture: sandy loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	11 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 6.1
2	11 inches	18 inches	sandy clay	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 6.1
3	18 inches	27 inches	sandy clay loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 6.1
4	27 inches	70 inches	sandy clay loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 6.1
5	70 inches	79 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 6.1

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 8

Soil Component Name: CIENEBA

Soil Surface Texture: sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Somewhat excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	16 inches	sandy loam	Not reported	Not reported	Max: Min:	Max: Min:
2	16 inches	20 inches	weathered bedrock	Not reported	Not reported	Max: Min:	Max: Min:

Soil Map ID: 9

Soil Component Name: MYFORD

Soil Surface Texture: sandy loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	11 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 6.1
2	11 inches	18 inches	sandy clay	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 6.1
3	18 inches	27 inches	sandy clay loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 6.1
4	27 inches	70 inches	sandy clay loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 6.1
5	70 inches	79 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 6.5 Min: 6.1

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 10

Soil Component Name: SOPER

Soil Surface Texture: cobbly loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	9 inches	cobbly loam	Not reported	Not reported	Max: Min:	Max: Min:
2	9 inches	29 inches	cobbly clay loam	Not reported	Not reported	Max: Min:	Max: Min:
3	29 inches	33 inches	weathered bedrock	Not reported	Not reported	Max: Min:	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
_____	_____	_____

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

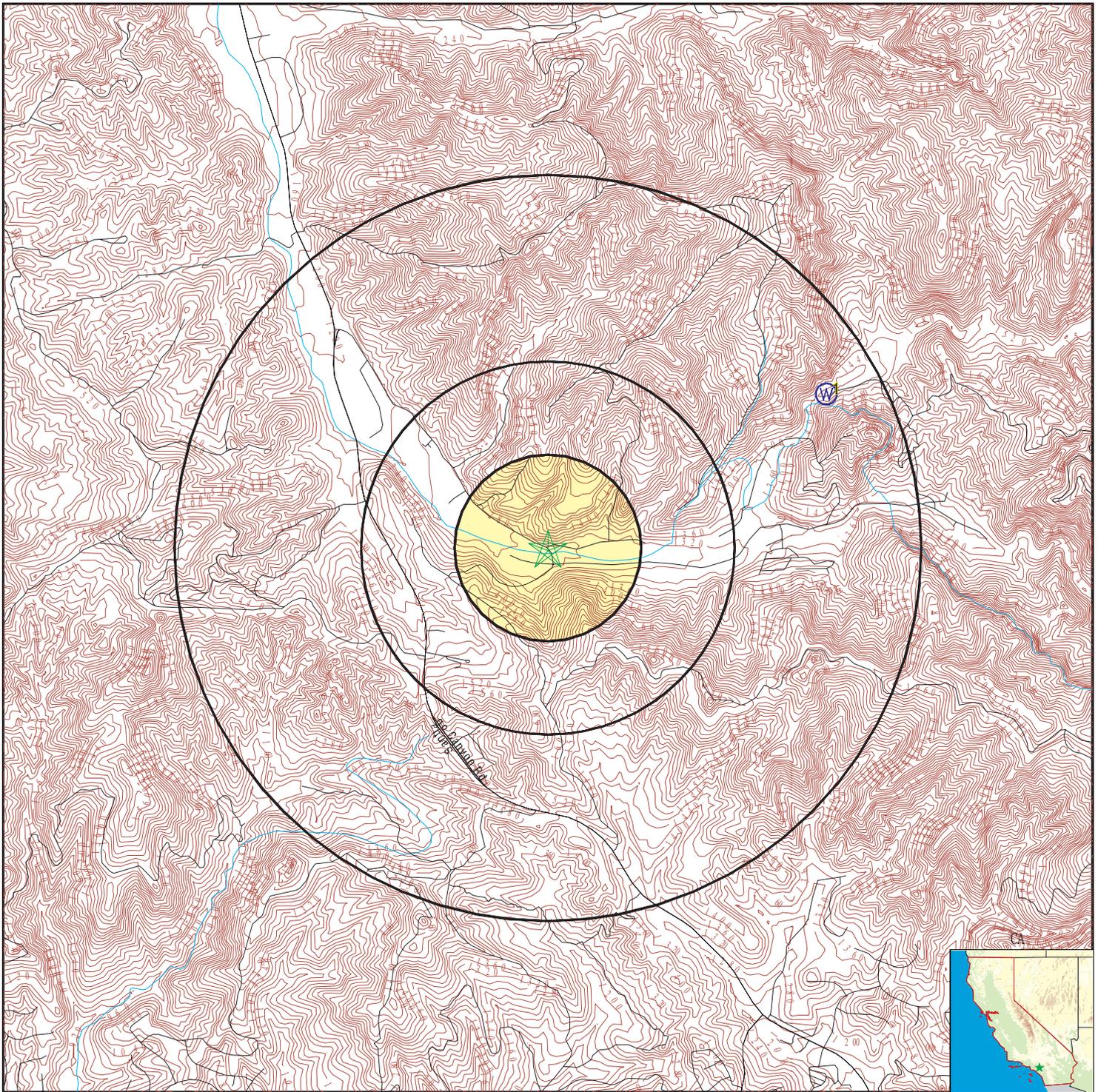
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	6077	1/2 - 1 Mile ENE

PHYSICAL SETTING SOURCE MAP - 6098671.2s



-  County Boundary
-  Major Roads
-  Contour Lines
-  Earthquake Fault Lines
-  Earthquake epicenter, Richter 5 or greater
-  Water Wells
-  Public Water Supply Wells
-  Cluster of Multiple Icons

-  Groundwater Flow Direction
-  Indeterminate Groundwater Flow at Location
-  Groundwater Flow Varies at Location
-  Closest Hydrogeological Data
-  Oil, gas or related wells



SITE NAME: Modjeska Canyon Road
 ADDRESS: Modjeska Canyon Road
 Silverado CA 92676
 LAT/LONG: 33.70875 / 117.636334

CLIENT: WRECO
 CONTACT: Joseph Mcconnell
 INQUIRY #: 6098671.2s
 DATE: June 19, 2020 7:05 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

1
ENE
1/2 - 1 Mile
Higher

CA WELLS 6077

Seq:	6077	Prim sta c:	05S/07W-28D01 S
Frds no:	3010095001	County:	30
District:	08	User id:	TEE
System no:	3010095	Water type:	G
Source nam:	HARDING CANYON	Station ty:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Latitude:	334253.2	Longitude:	1173721.7
Precision:	3	Status:	AR
Comment 1:	Not Reported	Comment 2:	Not Reported
Comment 3:	Not Reported	Comment 4:	Not Reported
Comment 5:	Not Reported	Comment 6:	Not Reported
Comment 7:	Not Reported		
System no:	3010095	System nam:	Santiago Cwd
Hqname:	Not Reported	Address:	P O BOX 575
City:	SILVERADO	State:	Not Reported
Zip:	92676	Zip ext:	0575
Pop serv:	2300	Connection:	657
Area serve:	SILVERADO CANYON		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
92676	3	0

Federal EPA Radon Zone for ORANGE County: 3

- Note: Zone 1 indoor average level > 4 pCi/L.
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
 : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for ORANGE COUNTY, CA

Number of sites tested: 30

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.763 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

California Drinking Water Quality Database

Source: Department of Public Health

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations

Source: Dept of Conservation, Geologic Energy Management Division

Telephone: 916-323-1779

Oil and Gas well locations in the state.

California Earthquake Fault Lines

Source: California Division of Mines and Geology

The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon

Source: Department of Public Health

Telephone: 916-210-8558

Radon Database for California

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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Appendix C EDR Historic Topo Map Report with QuadMatch™

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Modjeska Canyon Road

Modjeska Canyon Road

Silverado, CA 92676

Inquiry Number: 6098671.4

June 19, 2020

EDR Historical Topo Map Report

with QuadMatch™



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

06/19/20

Site Name:

Modjeska Canyon Road
Modjeska Canyon Road
Silverado, CA 92676
EDR Inquiry # 6098671.4

Client Name:

WRECO
1243 Alpine Rd Ste 108
Walnut Creek, CA 94596
Contact: Joseph Mcconnell



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by WRECO were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDR's Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:**Coordinates:**

P.O.#	P18066	Latitude:	33.70875 33° 42' 32" North
Project:	Modjeska Canyon Road Bridge	Longitude:	-117.636334 -117° 38' 11" West
		UTM Zone:	Zone 11 North
		UTM X Meters:	441035.67
		UTM Y Meters:	3730045.24
		Elevation:	1270.09' above sea level

Maps Provided:

2012	1949
1997	1942
1988	1935
1982	1902
1981	
1978	
1968, 1973	
1950, 1954	

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets



Santiago Peak
2012
7.5-minute, 24000



Lake Forest
2012
7.5-minute, 24000

1997 Source Sheets



Santiago Peak
1997
7.5-minute, 24000
Aerial Photo Revised 1994



El Toro
1997
7.5-minute, 24000
Aerial Photo Revised 1994

1988 Source Sheets



Santiago Peak
1988
7.5-minute, 24000
Aerial Photo Revised 1985

1982 Source Sheets



Santiago Peak
1982
7.5-minute, 24000
Aerial Photo Revised 1980



El Toro
1982
7.5-minute, 24000
Aerial Photo Revised 1980

Topo Sheet Key

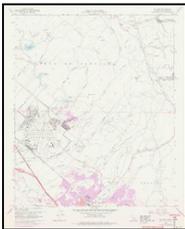
This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1981 Source Sheets



El Toro
1981
7.5-minute, 24000
Aerial Photo Revised 1978

1978 Source Sheets



El Toro
1978
7.5-minute, 24000
Aerial Photo Revised 1974

1968, 1973 Source Sheets



El Toro
1968
7.5-minute, 24000
Aerial Photo Revised 1967



Santiago Peak
1973
7.5-minute, 24000
Aerial Photo Revised 1973

1950, 1954 Source Sheets



El Toro
1950
7.5-minute, 24000
Aerial Photo Revised 1946



Santiago Peak
1954
7.5-minute, 24000
Aerial Photo Revised 1949

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1949 Source Sheets



El Toro
1949
7.5-minute, 24000
Aerial Photo Revised 1946

1942 Source Sheets



SANTIAGO PEAK
1942
15-minute, 50000

1935 Source Sheets

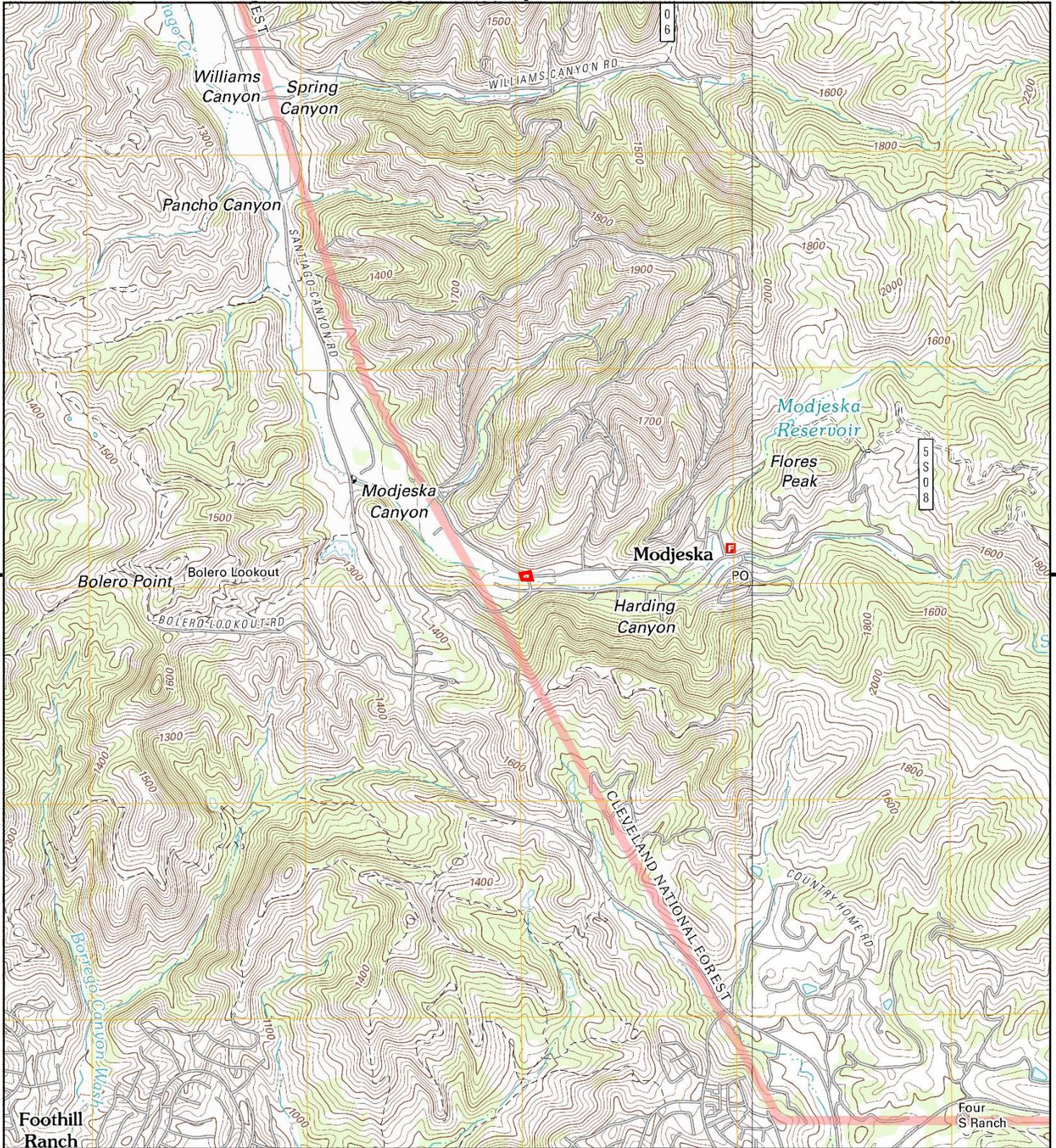


El Toro
1935
7.5-minute, 31680

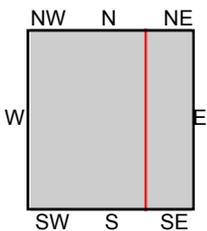
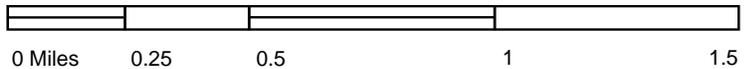
1902 Source Sheets



Corona
1902
30-minute, 125000



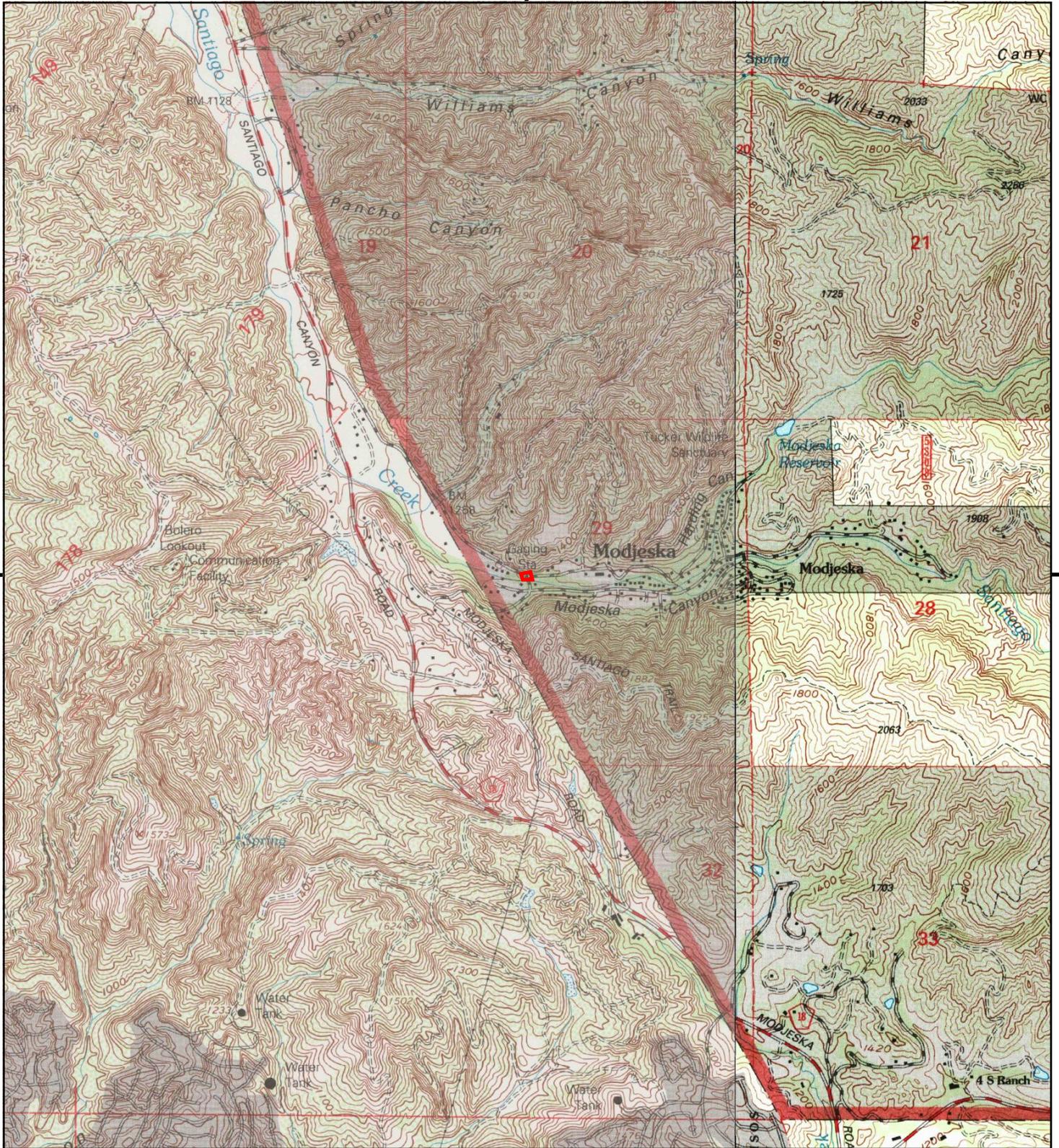
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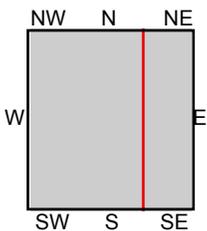
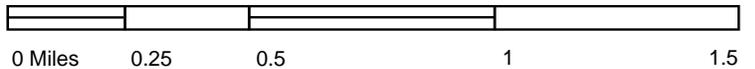
TP, Lake Forest, 2012, 7.5-minute
 E, Santiago Peak, 2012, 7.5-minute

SITE NAME: Modjeska Canyon Road
ADDRESS: Modjeska Canyon Road
 Silverado, CA 92676
CLIENT: WRECO





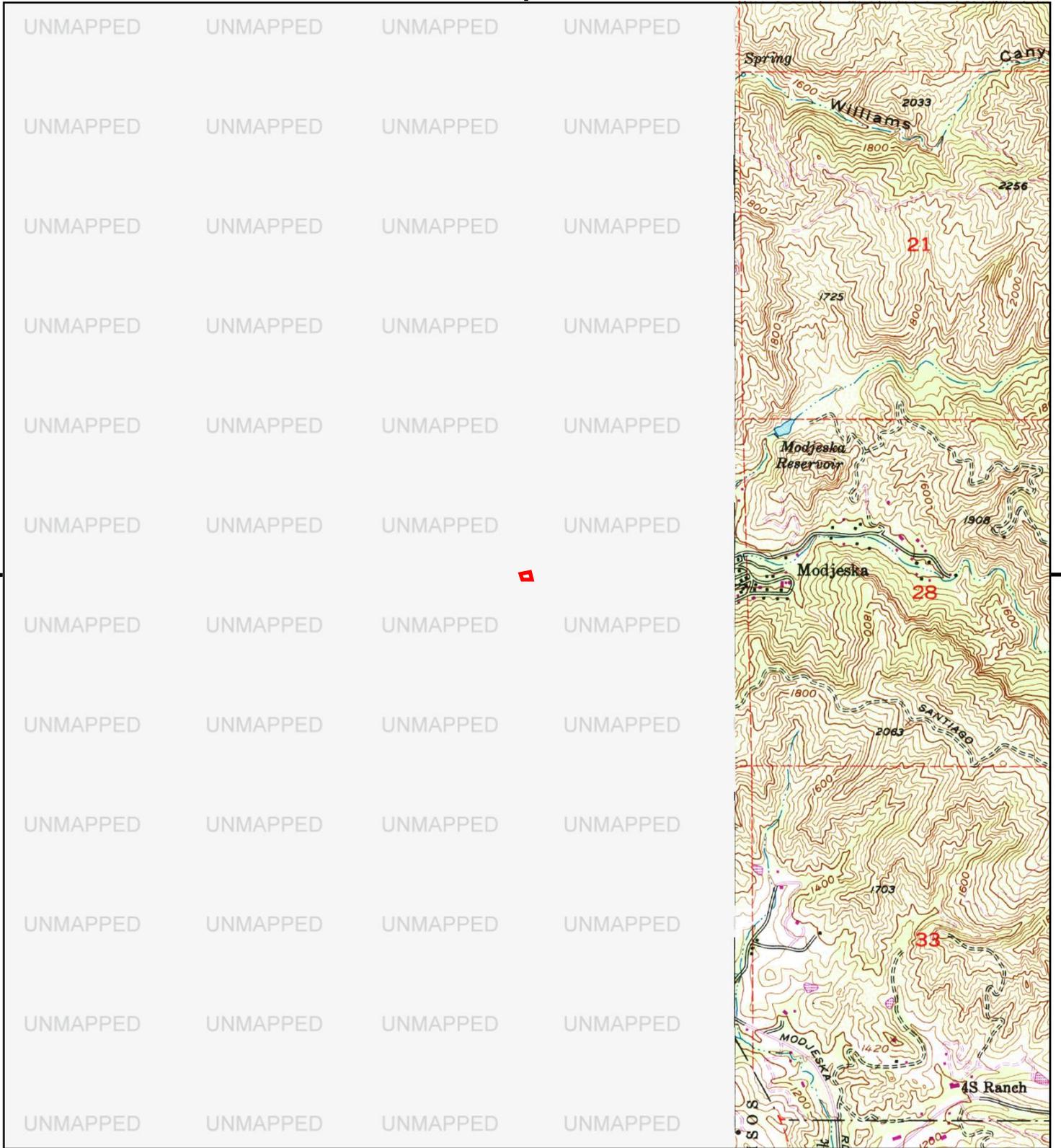
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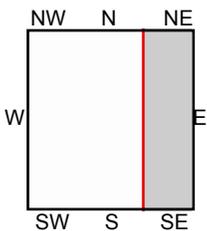
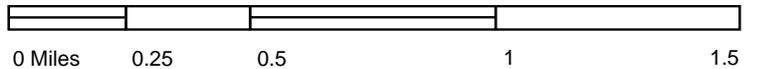
TP, El Toro, 1997, 7.5-minute
E, Santiago Peak, 1997, 7.5-minute

SITE NAME: Modjeska Canyon Road
ADDRESS: Modjeska Canyon Road
Silverado, CA 92676
CLIENT: WRECO





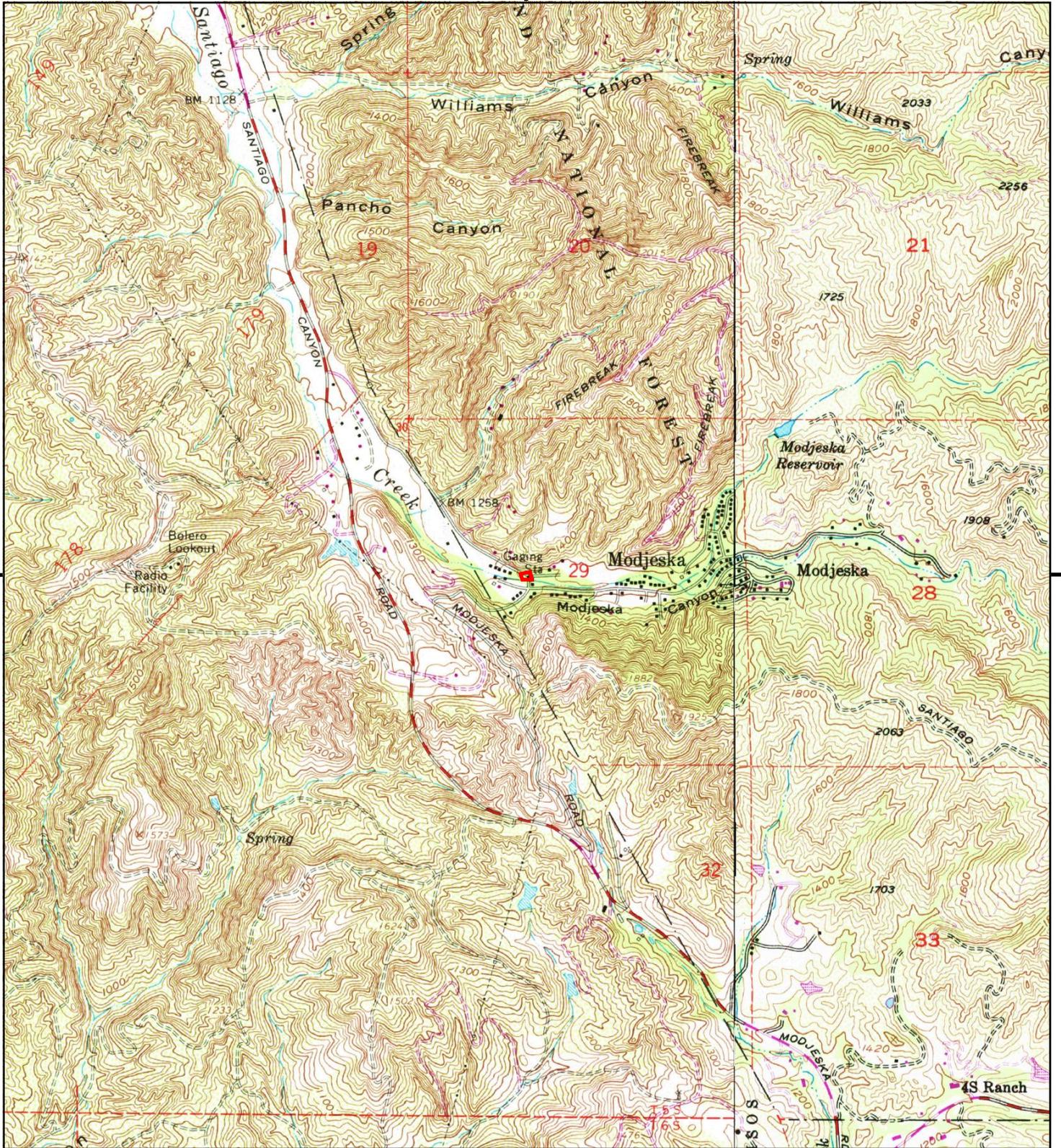
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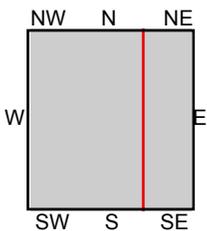
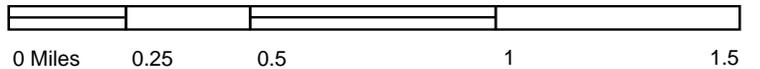
E, Santiago Peak, 1988, 7.5-minute

SITE NAME: Modjeska Canyon Road
 ADDRESS: Modjeska Canyon Road
 Silverado, CA 92676
 CLIENT: WRECO





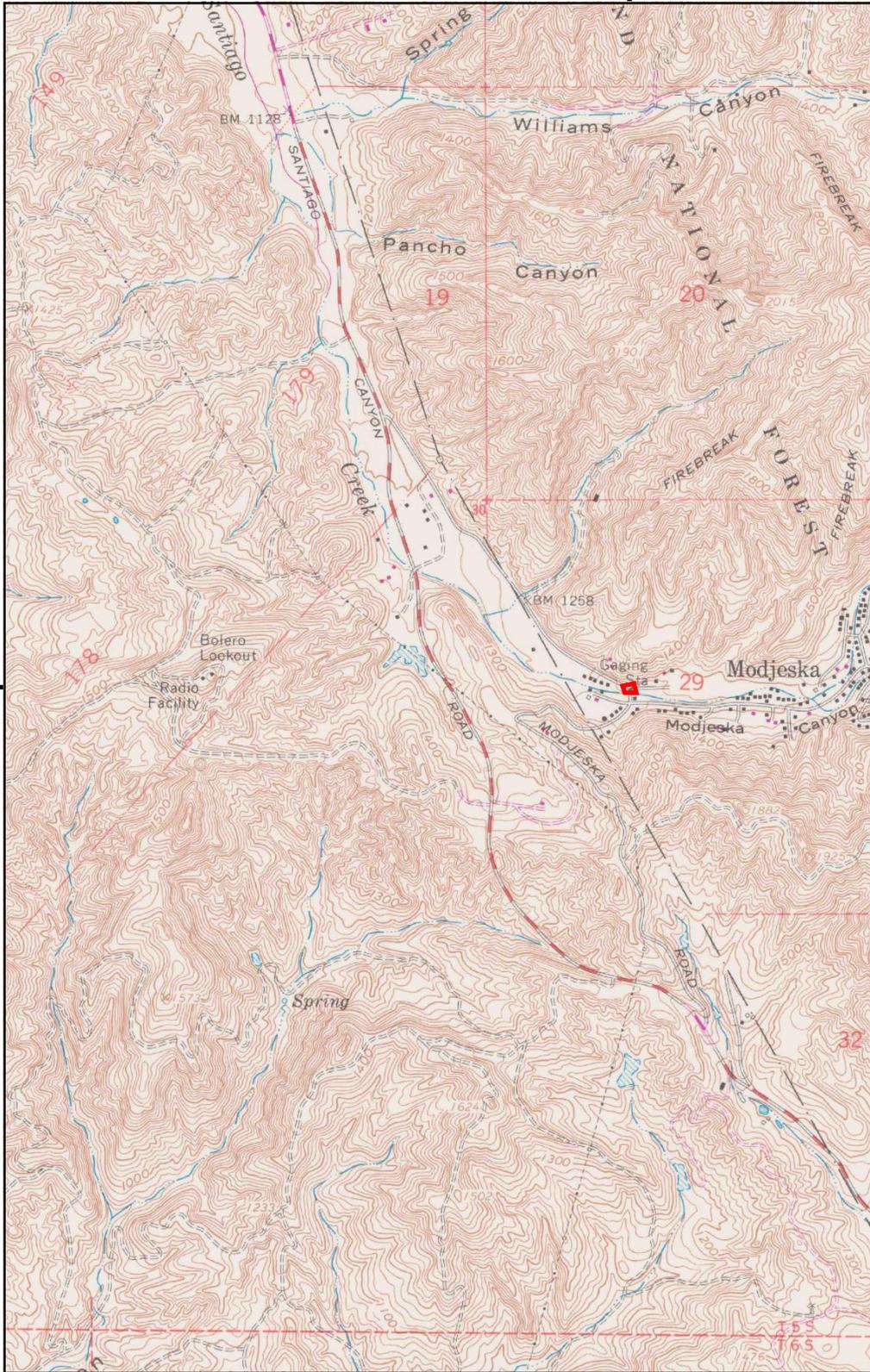
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TP, El Toro, 1982, 7.5-minute
E, Santiago Peak, 1982, 7.5-minute

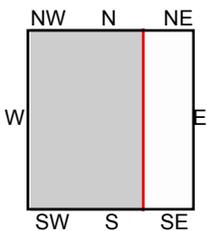
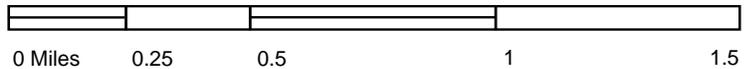
SITE NAME: Modjeska Canyon Road
ADDRESS: Modjeska Canyon Road
Silverado, CA 92676
CLIENT: WRECO





UNMAPPED UNMAPPED
 UNMAPPED UNMAPPED

This report includes information from the following map sheet(s).



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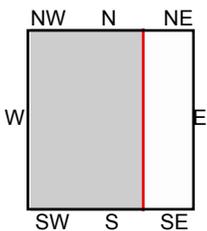
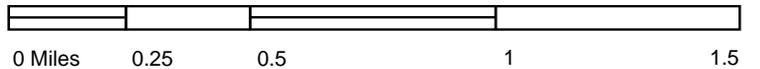
SITE NAME: Modjeska Canyon Road
ADDRESS: Modjeska Canyon Road
 Silverado, CA 92676
CLIENT: WRECO





UNMAPPED UNMAPPED
 UNMAPPED UNMAPPED

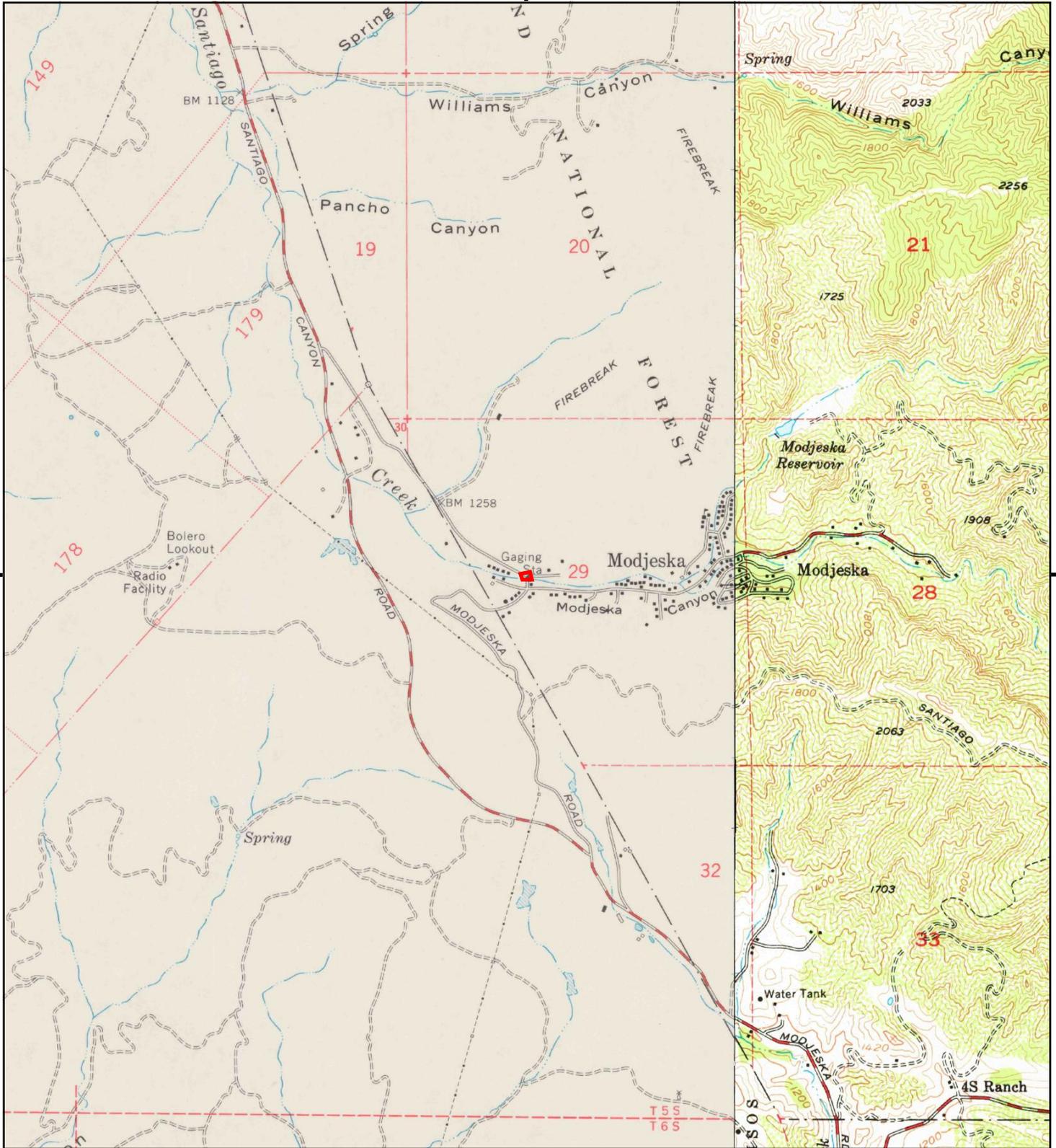
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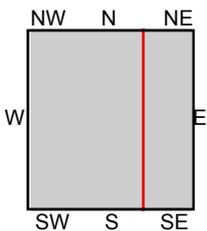
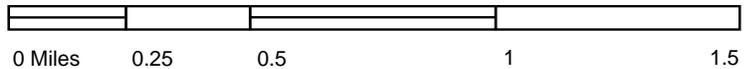
TP, El Toro, 1978, 7.5-minute

SITE NAME: Modjeska Canyon Road
 ADDRESS: Modjeska Canyon Road
 Silverado, CA 92676
 CLIENT: WRECO





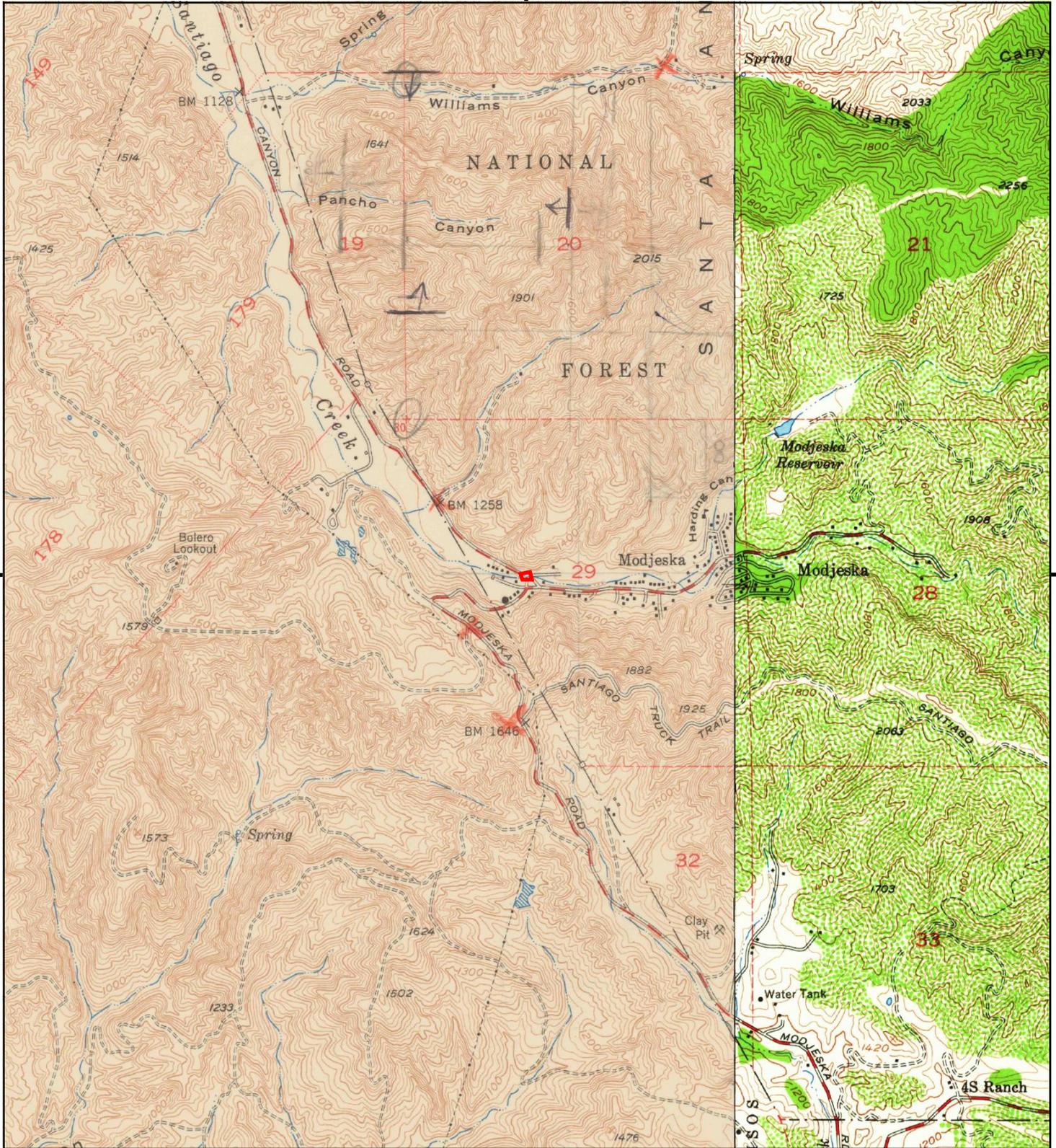
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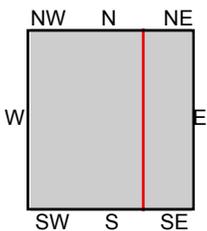
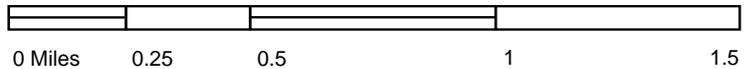
TP, El Toro, 1968, 7.5-minute
E, Santiago Peak, 1973, 7.5-minute

SITE NAME: Modjeska Canyon Road
ADDRESS: Modjeska Canyon Road
Silverado, CA 92676
CLIENT: WRECO





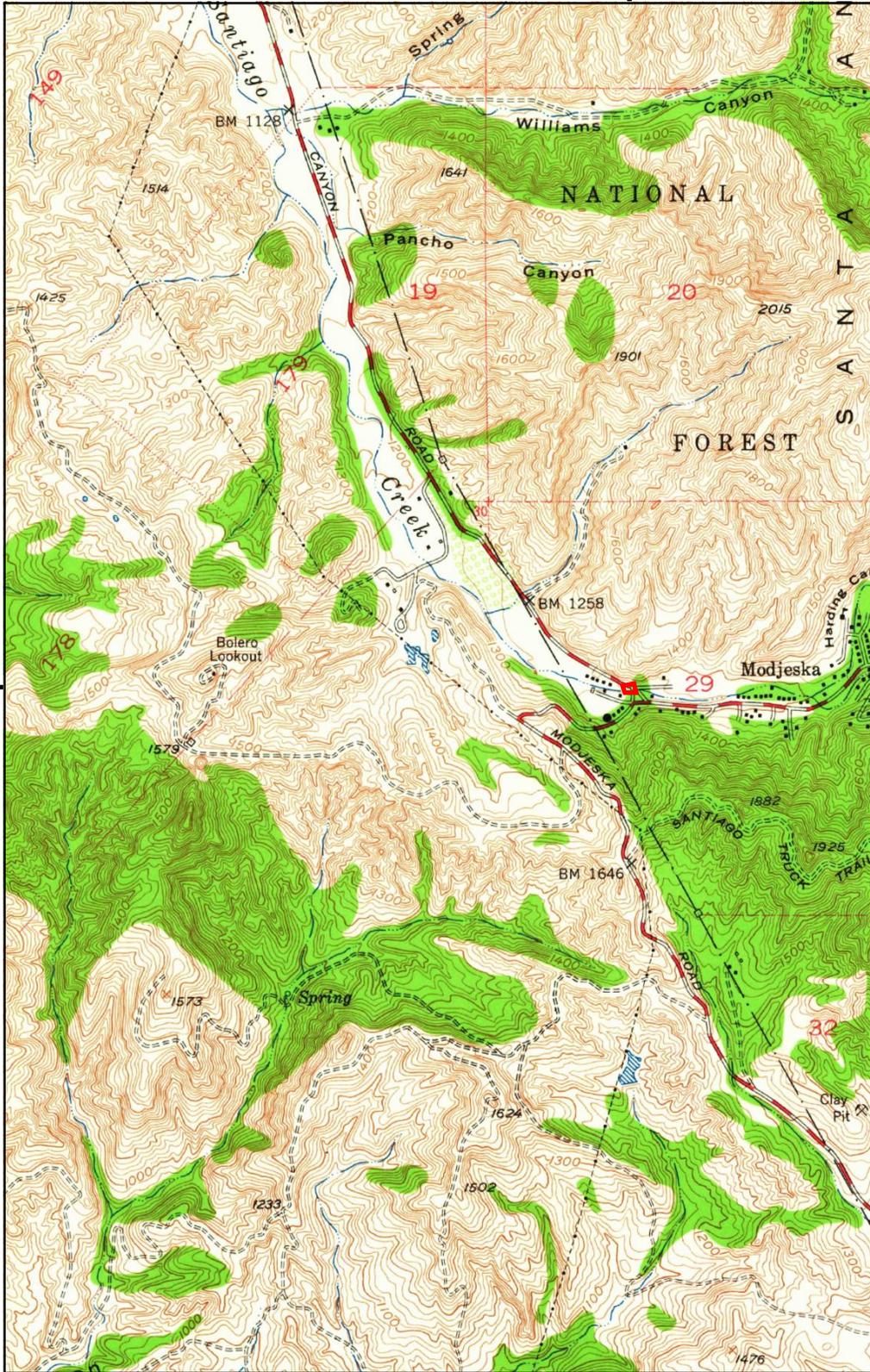
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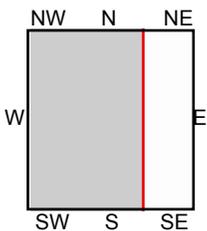
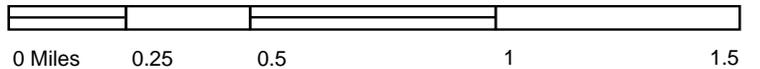
TP, El Toro, 1950, 7.5-minute
E, Santiago Peak, 1954, 7.5-minute

SITE NAME: Modjeska Canyon Road
ADDRESS: Modjeska Canyon Road
Silverado, CA 92676
CLIENT: WRECO





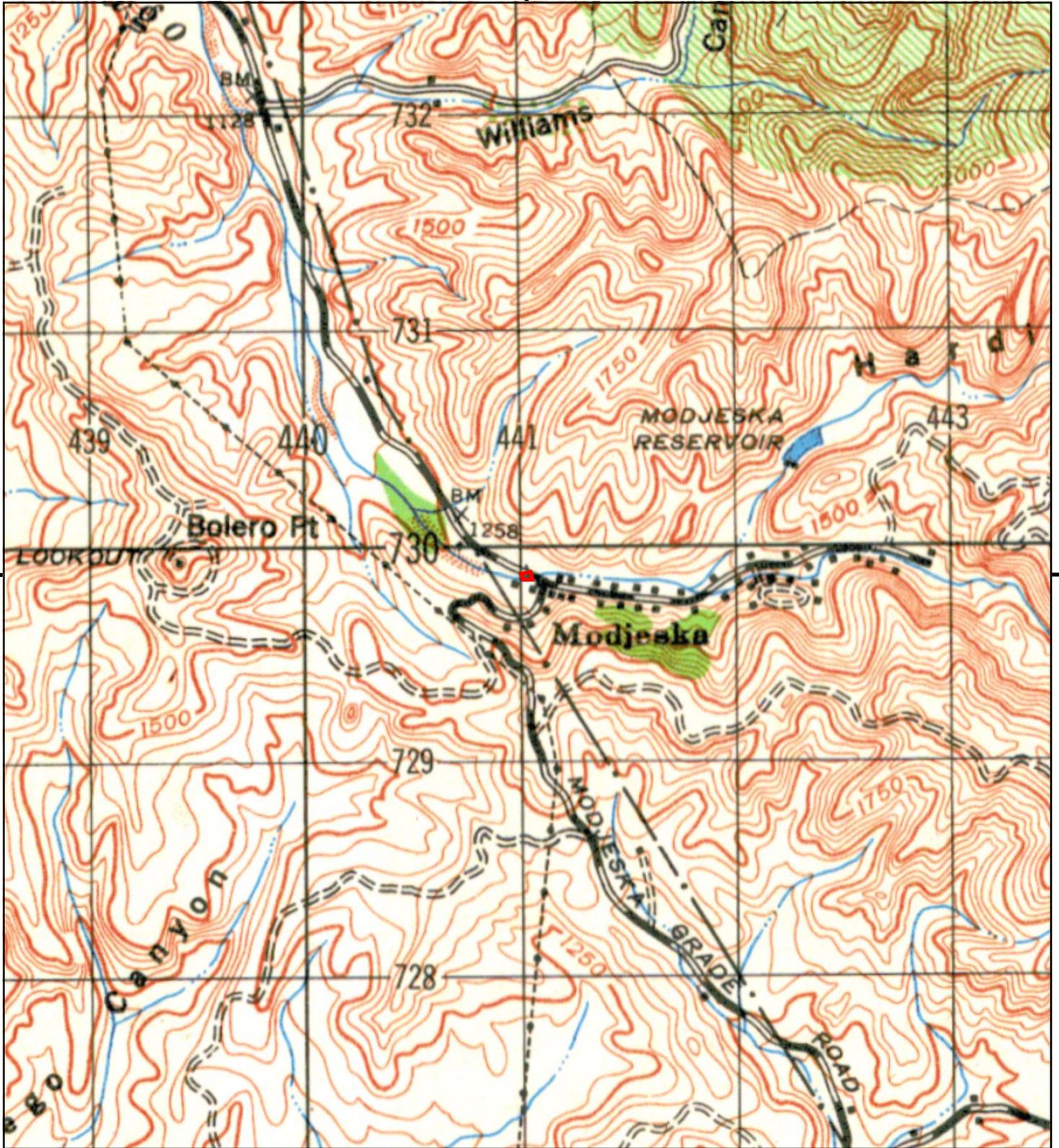
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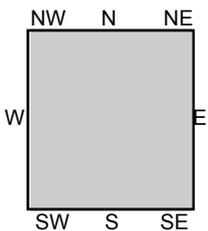
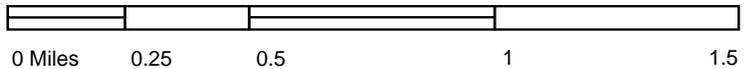
TP, El Toro, 1949, 7.5-minute

SITE NAME: Modjeska Canyon Road
ADDRESS: Modjeska Canyon Road
 Silverado, CA 92676
CLIENT: WRECO





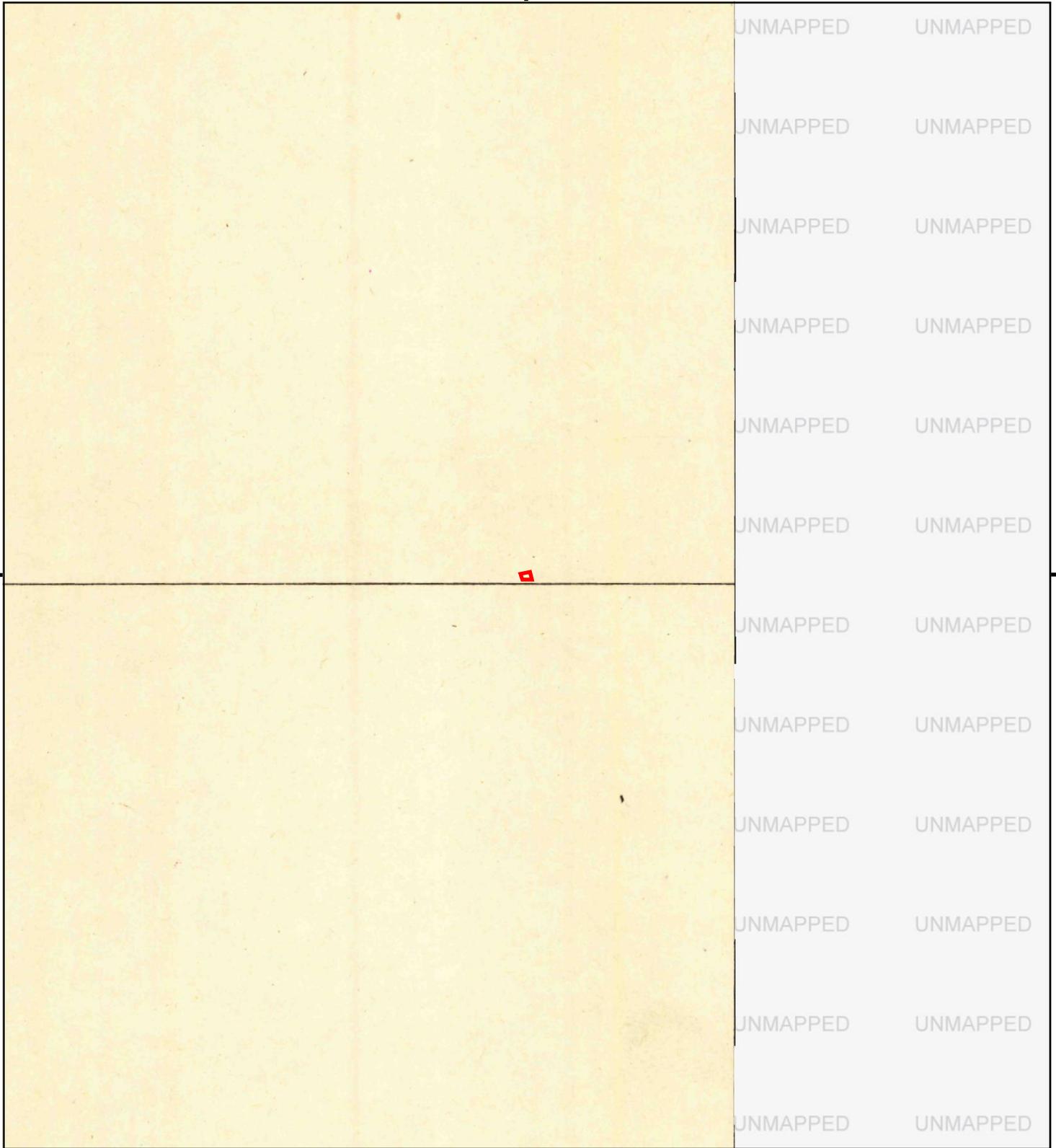
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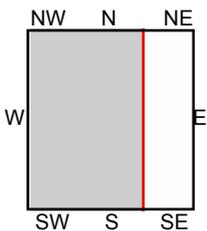
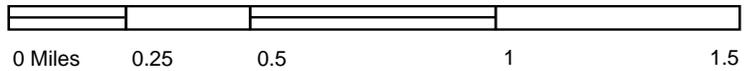
TP, SANTIAGO PEAK, 1942, 15-minute

SITE NAME: Modjeska Canyon Road
 ADDRESS: Modjeska Canyon Road
 Silverado, CA 92676
 CLIENT: WRECO





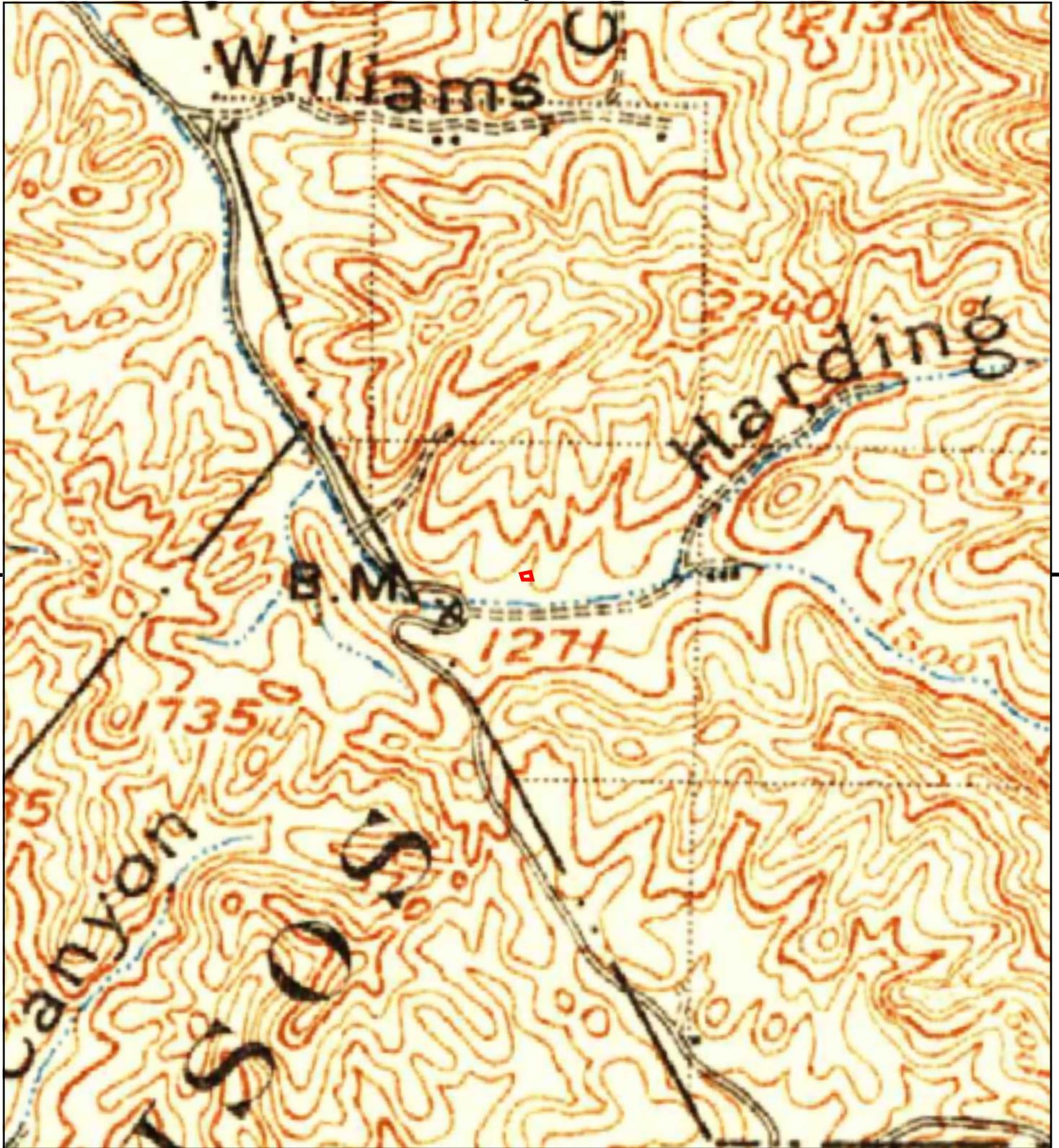
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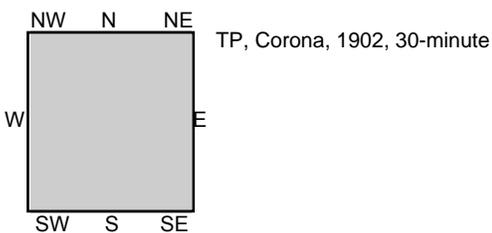
TP, El Toro, 1935, 7.5-minute

SITE NAME: Modjeska Canyon Road
ADDRESS: Modjeska Canyon Road
Silverado, CA 92676
CLIENT: WRECO





This report includes information from the following map sheet(s).



SITE NAME: Modjeska Canyon Road
 ADDRESS: Modjeska Canyon Road
 Silverado, CA 92676
 CLIENT: WRECO



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Appendix D The EDR Aerial Photo Decade Package

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Modjeska Canyon Road

Modjeska Canyon Road

Silverado, CA 92676

Inquiry Number: 6098671.8

June 19, 2020

The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

06/19/20

Site Name:

Modjeska Canyon Road
Modjeska Canyon Road
Silverado, CA 92676
EDR Inquiry # 6098671.8

Client Name:

WRECO
1243 Alpine Rd Ste 108
Walnut Creek, CA 94596
Contact: Joseph McConnell



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1994	1"=500'	Acquisition Date: June 01, 1994	USGS/DOQQ
1990	1"=500'	Flight Date: August 29, 1990	USDA
1989	1"=500'	Flight Date: August 03, 1989	USDA
1985	1"=500'	Flight Date: September 13, 1985	USDA
1974	1"=500'	Flight Date: November 06, 1974	USGS
1967	1"=500'	Flight Date: May 07, 1967	USGS
1952	1"=500'	Flight Date: December 12, 1952	USDA
1949	1"=500'	Flight Date: May 05, 1949	USDA
1946	1"=500'	Flight Date: December 29, 1946	USGS
1938	1"=500'	Flight Date: June 21, 1938	USDA

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INQUIRY #: 6098671.8

YEAR: 2016

— = 500'





INQUIRY #: 6098671.8

YEAR: 2012

— = 500'





INQUIRY #: 6098671.8

YEAR: 2009

— = 500'





INQUIRY #: 6098671.8

YEAR: 2005

— = 500'



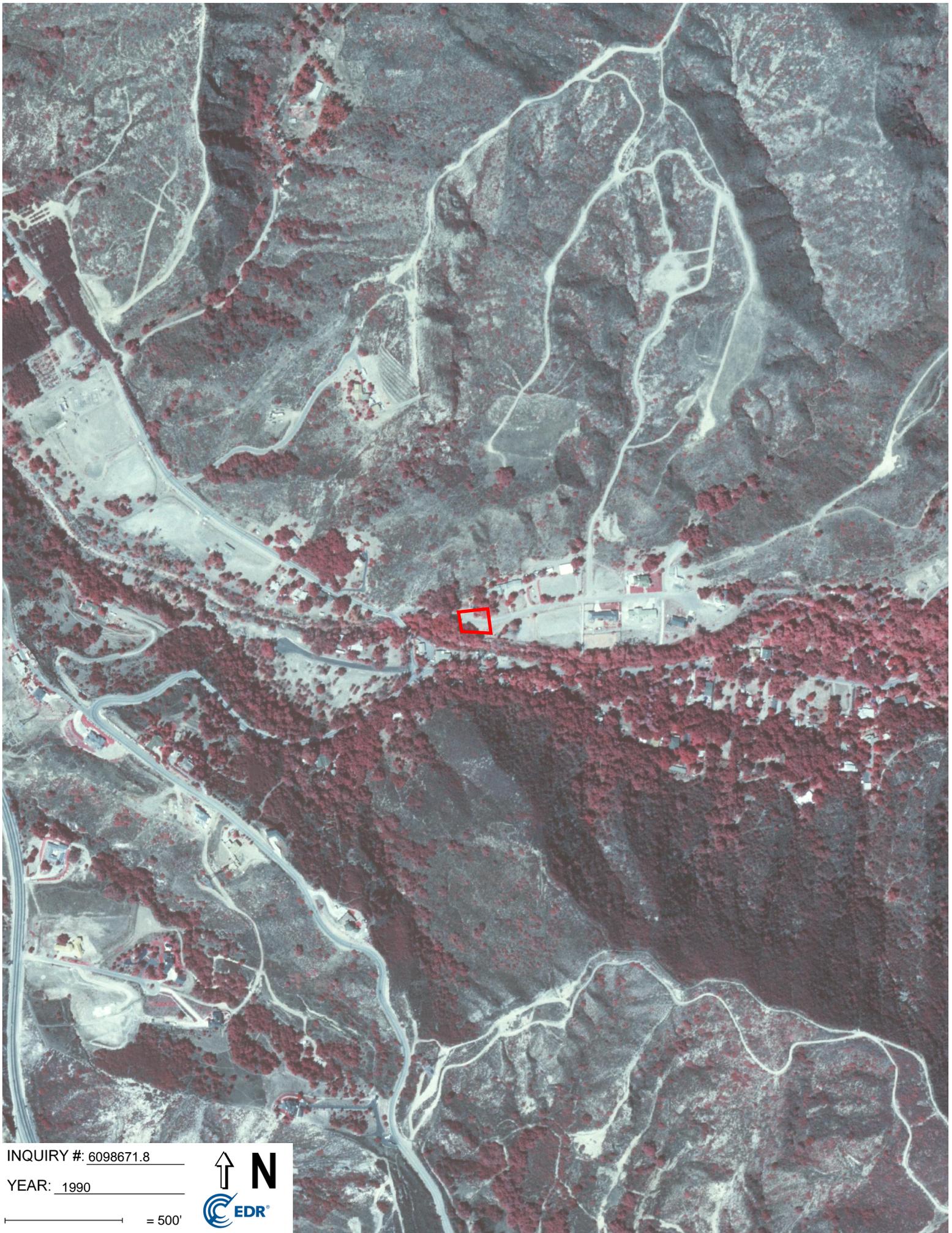


INQUIRY #: 6098671.8

YEAR: 1994

— = 500'



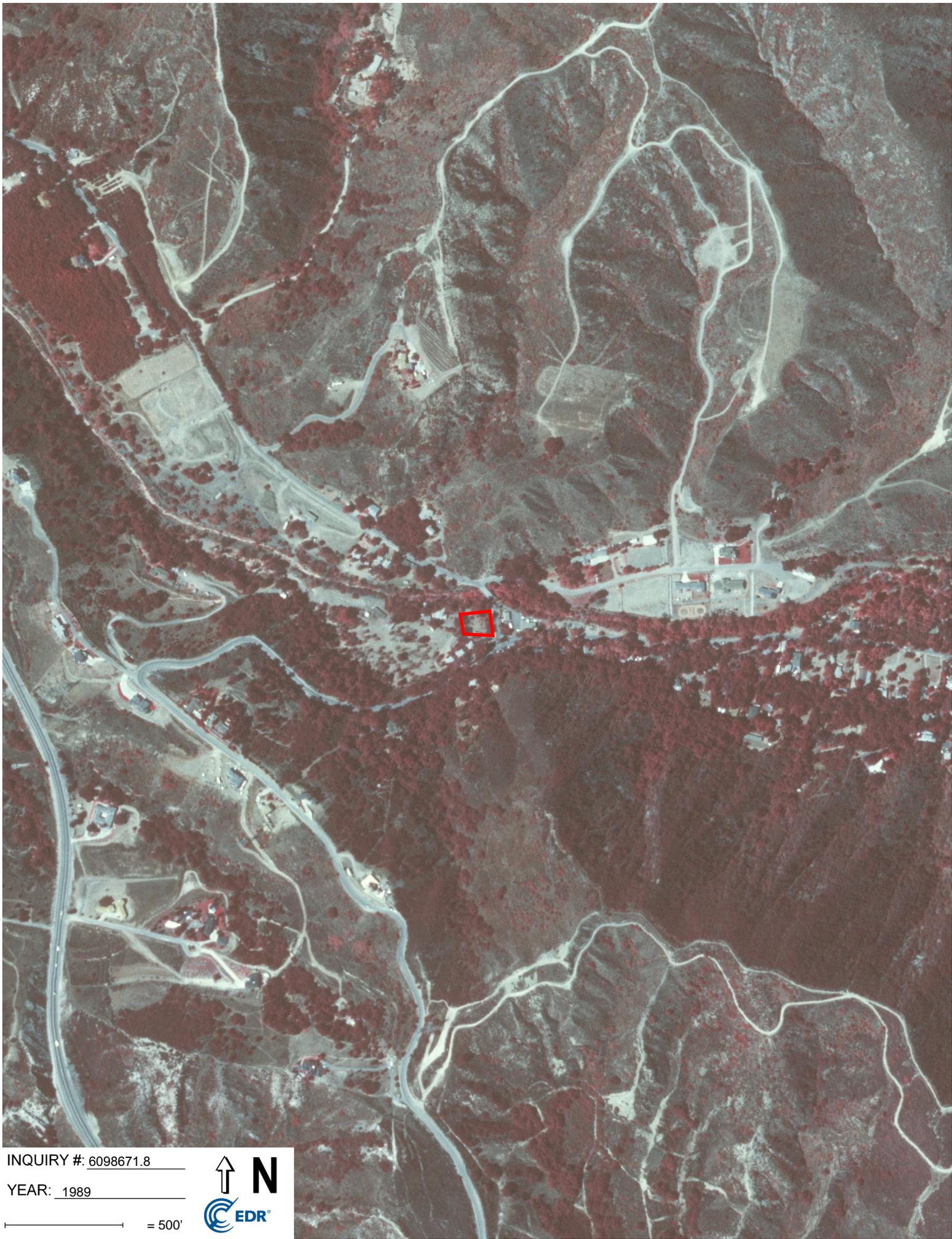


INQUIRY #: 6098671.8

YEAR: 1990

— = 500'





INQUIRY #: 6098671.8

YEAR: 1989

— = 500'



INQUIRY #: 6098671.8

YEAR: 1985

— = 500'





INQUIRY #: 6098671.8

YEAR: 1974

— = 500'





INQUIRY #: 6098671.8

YEAR: 1967

— = 500'





INQUIRY #: 6098671.8

YEAR: 1952

— = 500'





INQUIRY #: 6098671.8

YEAR: 1949

— = 500'



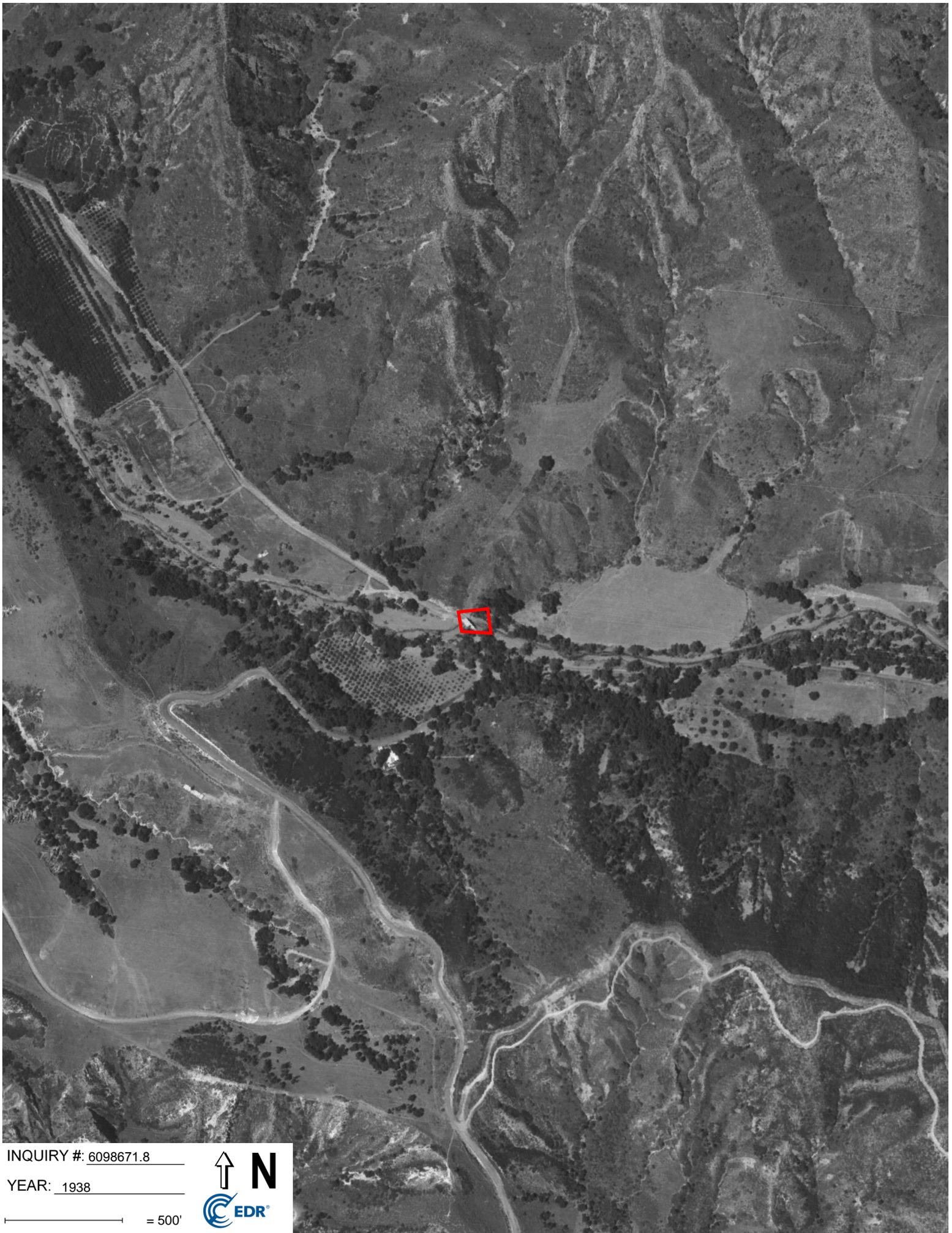


INQUIRY #: 6098671.8

YEAR: 1946

— = 500'





INQUIRY #: 6098671.8

YEAR: 1938

— = 500'



Appendix E Certified Sanborn® Map Report

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Modjeska Canyon Road

Modjeska Canyon Road

Silverado, CA 92676

Inquiry Number: 6098671.3

June 19, 2020

Certified Sanborn® Map Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

06/19/20

Site Name:

Modjeska Canyon Road
Modjeska Canyon Road
Silverado, CA 92676
EDR Inquiry # 6098671.3

Client Name:

WRECO
1243 Alpine Rd Ste 108
Walnut Creek, CA 94596
Contact: Joseph Mcconnell



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by WRECO were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 247D-4C8E-9ED1
PO # P18066
Project Modjeska Canyon Road Bridge

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results

Certification #: 247D-4C8E-9ED1

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

The Sanborn Library LLC Since 1866™

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Appendix F The EDR-City Directory Image Report

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Modjeska Canyon Road

Modjeska Canyon Road
Silverado, CA 92676

Inquiry Number: 6098671.5
June 25, 2020

The EDR-City Directory Image Report

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Findings

City Directory Images

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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Data by

infoUSA[®]

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Target Street</u>	<u>Cross Street</u>	<u>Source</u>
2014	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2010	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2005	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2000	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
1995	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
1992	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
1987	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1982	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1976	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1973	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

Modjeska Canyon Road
Silverado, CA 92676

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
-------------	-----------------	---------------

MODJESKA CANYON RD

2014	pg A2	EDR Digital Archive
2010	pg A5	EDR Digital Archive
2005	pg A8	EDR Digital Archive
2000	pg A11	EDR Digital Archive
1995	pg A13	EDR Digital Archive
1992	pg A15	EDR Digital Archive
1987	pg A16	Haines Criss-Cross Directory
1987	pg A17	Haines Criss-Cross Directory
1982	pg A18	Haines Criss-Cross Directory
1982	pg A19	Haines Criss-Cross Directory
1976	pg A20	Haines Criss-Cross Directory
1976	pg A21	Haines Criss-Cross Directory
1973	pg A22	Haines Criss-Cross Directory

FINDINGS

CROSS STREETS

Year

CD Image

Source

MARKUSON RD

2014	pg. A1	EDR Digital Archive	
2010	pg. A4	EDR Digital Archive	
2005	pg. A7	EDR Digital Archive	
2000	pg. A10	EDR Digital Archive	
1995	pg. A12	EDR Digital Archive	
1992	pg. A14	EDR Digital Archive	
1987	-	Haines Criss-Cross Directory	Street not listed in Source
1982	-	Haines Criss-Cross Directory	Street not listed in Source
1976	-	Haines Criss-Cross Directory	Street not listed in Source
1973	-	Haines Criss-Cross Directory	Street not listed in Source

City Directory Images

MARKUSON RD 2014

28401 TAMMEN, CLAUDIA L
28441 PARSONS, MARY E
28481 GAMEL, TURNER
28492 HASSETT, KENNETH L
28531 OCCUPANT UNKNOWN,
28561 MITCHELL, WAYNE A
28562 KUSTICH, ROBERT A
28591 AMATO, VINCENT J
28592 SARKISSIAN, GEOFFREY Y
28611 MCCAULEY, LOIS C
28612 CROCKER, MARK L

MODJESKA CANYON RD 2014

17321 HUNT, MARY
 17350 CASTRUITA, LORRAINE A
 17352 ALVES, CHRISTOP A
 17354 SILL, SASHA
 17356 VASQUEZ, LITHA Y
 17391 BROWN, DANNY E
 28072 CALTHARP, GARY W
 KINSMAN, JOHN S
 SAMPSON, JESSICA A
 28092 RIEGLE, KENNETH C
 28100 BATES, GREG C
 28142 CAMPOS, FRANK M
 28182 COFFEY, MARIA R
 28201 EDGAR, SHERYL L
 28202 VILORIA, BENNY H
 28222 OCCUPANT UNKNOWN,
 28271 HARE, DANIEL T
 28331 MCWILLIAMS, PHILIP A
 28371 HUNT, ROBERT C
 28372 ACCONGIO, PAUL B
 28422 SWEENEY, ERIC
 28452 OCCUPANT UNKNOWN,
 28456 STRELOW, TOM E
 28502 CORONA, EUGENE A
 28546 LANDERS, KENNETH C
 28592 KERSH, RICHARD R
 SIGNS BY KERSH
 28602 KERSH, RICHARD R
 28611 MCKINLAY, WILLIAM
 28612 OCCUPANT UNKNOWN,
 28614 WEEL, MARTIN D
 28631 BURBA, TOM R
 28640 MATTHEWS, RIK W
 28641 FRICK, BRIAN J
 28642 RSSE STRUCTURAL ENGINEERS
 28651 DAY, BRUCE S
 28661 KLINGER, RICHARD E
 28671 WISHART, PAMELA
 28682 MANNING, ROGER B
 28687 TRIZINSKY, DENISE
 28691 MARTINEZ, GUILLERMO L
 28711 WHITFIELD, JAHNATHON V
 28721 WILLIAMS, JASON R
 28722 SCHULTZ, BOYD L
 28726 MOORE, TRACY S
 28728 TALBOTT, JEFFERSON F
 28730 NEWELL, EDWARD R
 28732 FRIESEN, BRIAN G
 28745 HETZEL, YASHA L
 28751 SCHROEDER, JON

MODJESKA CANYON RD 2014 (Cont'd)

28752	LANE, JEFF S
28762	THOMPSON, MICHAEL W
28810	WATROUS, GEORGE S
28811	CAIN, MICHAEL
28815	WOODWARD, MARK L
28822	CAMPBELL, JAMES W
28842	METZGER, THEODORE E
28852	ALBRIGHT, SHERI L
28871	VOEHL, RALPH A
28872	STINSON, TIMOTHY L
28875	JAMES, SONDR A J
28879	MCNEIL, DAVID J
28881	RODEWALD, DAVID B
28882	TEMPLE, MICHAEL L
28890	MODJESKA COMMUNITY CENTER
28891	OCCUPANT UNKNOWN,
28892	HOYER, MARK A
28902	CHAMPION, ROBERT M
28952	CHAMPION, ANNE M
	RIEDEL, BRITTANY K
29102	WILLERT, JOANETT
29122	TERUSA, ANTHONY H
29221	MARTINEZ, CRYSTAL
29235	GIACINTO, SAL G
29241	BISHOP, MARCIA A
29252	RAWSON, DAN
29255	HINGLE, CHRIS F
	KUSTICH, NATALIE E
	NARANJO, ANDREW
29257	FINCH, GEORGE T
29295	OCCUPANT UNKNOWN,
29305	MURREN, DAVID C
	PRESCOTT, ALFONSO
29322	TUCKER WILDLIFE SANCTUARY
29351	SHALD, SCOTT D
29371	GRAVES, DEBORAH H
29372	HULBROCK, ROBERT F
29412	RELYEA, DANIEL
29418	DUFF, STEVEN G
29421	WRIGHT, CHARLES E
29422	BROWN, WILLIAM D
29433	SILL, JAMES C
29442	LABAR, PAULA J
29456	GANNAWAY, JOHN D

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28532 POWER, JEFF R
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 17356 VASQUEZ, LITHA Y
 17391 BROWN, DANNY E
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 28012 KUSICKI, LIDIA A
 28051 NOLAN-RIEGLE, MARY C
 28072 CALTHARP, GARY W
 28100 BATES, GREGORY C
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 MUNSEY, PHILIP M
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 28202 VILORIA, BENNY D
 28222 OCCUPANT UNKNOWN,
 28271 HARE, DANIEL T
 28331 MCWILLIAMS, PHILIP A
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 28372 OCCUPANT UNKNOWN,
 28422 FERGUSON, OWEN M
 28456 STRELOW, JAMES C
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 28532 FREDETTE, LORE
 28546 FRIDAY, DALE
 28592 KERSH, ALVERDA R
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 28600 OCCUPANT UNKNOWN,
 28602 KERSH, RICHARD R
 28611 MCKINLAY, WILLIAM
 28612 LANG, ALFRED J
 MAKING MUSIC
 28614 WEEL, MARTIN D
 28621 OCCUPANT UNKNOWN,
 28631 OCCUPANT UNKNOWN,
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 28641 FRICK, BRIAN J
 28642 SCHEIBEL, ROBERT D
 28651 DAY, BRUCE S
 28661 KLINGER, RICHARD E
 28671 JOHNSTONE, THOMAS C
 28672 KINSMAN, JOHN S
 28682 MANNING, ROGER B
 28687 TRIZINSKY, DENISE
 28691 MARTINEZ, GUILLERMO L
 28711 WHITFIELD, JAHNATHON V
 28721 WISHART, JENNIFER L
 28722 SCHULTZ, BOYD L
 28726 WATTS, ADAM
 28728 TALBOTT, JEFFERSON F

MODJESKA CANYON RD 2010 (Cont'd)

28730	NEWELL, BRUCE H
28732	PARKS, CRYSTAL L
28745	HETZEL, YASHA L
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28762	THOMPSON, MICHAEL W
28810	ROZELLE, MARK A
28811	OCCUPANT UNKNOWN,
28815	OCCUPANT UNKNOWN,
28822	CAMPBELL, JAMES D
28842	LAZARONY, LAURIE M
28852	ALBRIGHT, SHERI L
28871	VOEHL, RALPH A
28872	STINSON, TIMOTHY L
28875	JAMES, SONDR A J
28879	MCNEIL, DAVID J
28882	TEMPLE, MICHAEL L
28890	MODJESKA COMMUNITY CTR
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28892	HOYER, MARK A
28902	CHAMPION, ROBERT M
28952	MEDINA, DAVID S
29042	OCCUPANT UNKNOWN,
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29235	OCCUPANT UNKNOWN,
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29252	WARD, DAN R
29255	HINGLE, CHRIS F
	KUSTICH, NATALIE
	NARANJO, ANDREW
	TERRY, RYAN
29257	FINCH, GEORGE T
29295	OCCUPANT UNKNOWN,
29305	CARVER, BLAKE
	DILEO, ERIC J
	OCCUPANT UNKNOWN,
	PRESCOTT, ALFONSO
	WALKER, JUSTIN J
29322	TUCKER WILDLIFE SANCTUARY
29351	SHALD, SCOTT D
29371	ENOCHS, STEVE R
29372	HULBROCK, ROBERT F
29412	RELYEA, MICHAEL J
29418	OCCUPANT UNKNOWN,
29421	STOKES, DAVID J
29422	BROWN, WILLIAM D
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29442	LABAR, WILLIAM A
29456	GANNAWAY, JOHN D

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28401 ARMBRUSTER, DON C
28441 OCCUPANT UNKNOWN,
28481 TURNER, MARY A
28492 HASSETT, KENNETH L
28531 HYDRATION DIRECT
POWER, GARY L
28532 LAW OFFICE OF RICH
STRATTON, JAY C
28561 MITCHELL, WAYNE A
28562 KUSTICH, ROBERT A
28591 AMATO, VINCENT J
28592 SARKISSIAN, GEOFFREY Y
28611 MACE, JAMES K
28612 ANDREWS, MARK A

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16956 OCCUPANT UNKNOWN,
 17286 MORRIS, JESS A
 17350 DECOPI PUBLISHING
 OCCUPANT UNKNOWN,
 17352 OCCUPANT UNKNOWN,
 17354 MOORE, WILLIAM R
 17356 VASQUEZ, LITHA Y
 17391 BROWN, DANNY E
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 27992 LITZ, ALAN M
 28051 MYERS, RAY R
 28072 OCCUPANT UNKNOWN,
 28100 BATES, GREGORY C
 28182 MUNSEY, PHILIP M
 28192 PONY EXPRESS
 28202 VILORIA, BENNY H
 28222 OCCUPANT UNKNOWN,
 28271 HARE, DANIEL T
 28331 COMBS, AARON
 28352 WILLARD, JAMES J
 28371 OCCUPANT UNKNOWN,
 28372 LUCY, LESLIE P
 28422 FERGUSON, OWEN M
 28452 OROZCO, JOHN
 28456 OCCUPANT UNKNOWN,
 28502 CORONA, EUGENE A
 28532 SEEMANN, ROGER W
 28592 KERSH SIGNS
 KERSH, ALVERDA
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 28611 ABRAHAMSON, RAY H
 28612 LANG, ALFRED J
 MAKING MUSIC
 28614 WEEL, MARTIN
 28621 OCCUPANT UNKNOWN,
 28631 OCCUPANT UNKNOWN,
 28640 MATTHEWS, RIK W
 28641 FRICK, BRIAN J
 28642 SCHEIBEL, ROBERT D
 28651 DAY, BRUCE S
 28661 KLINGER, RICHARD E
 28671 MUDD, JOHN A
 28672 KINSMAN, JOHN S
 28682 MANNING, DORIS L
 28687 TRIZINSKY, DENISE
 28691 MARTINEZ, GUILLERMO L
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 28721 VOGEL, FRED
 28722 SCHULTZ, BOYD L

MARKUSON RD 2000

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28401 ARMBRUSTER, DON
28561 MITCHELL, WAYNE A
28562 KUSTICH, ROBERT A
28611 WILSON, DAN P

MODJESKA CANYON RD 2000

28182 MUNSEY, PHILIP M
28271 HARE, D
28331 COMBS, AARON
28372 MEANS, RICHARD
28456 STRELOW, TOM E
28502 CORONA, EUGENE A
28532 GRIFFITH, WILLIAM M
SEEMANN, ROGER W
28592 KERSH, DALE L
28612 SALNESS, ANN
28614 DAVIS, L
28621 KETRON, STEPHEN
28640 MATTHEWS, RIK
28641 FRICK, BRIAN
28651 DAY, BRUCE S
28682 WILLIAMS, LAURA
28691 MARTINEZ, G
28711 WHITFIELD, JAHN
28721 VOGEL, FRED
28730 NEWELL, BRUCE H
28732 DUDLEY, PAUL
28745 HETZEL, LEO
28751 JOHNSON, PETER
28842 LAZARONY, LORI M
28852 ALBRIGHT, R
HINKLE, BRIAN
28875 WALDO, JACK
28881 RAINS, MICHELE
28902 NELSON, CARLA R
28952 CHAMPION, ANNE M
29122 RIGNEY, THOMAS
29235 GIACINTO, SAL
29257 HOLLENBECK, JEFF
29295 COYTE, CHRIS
29305 PAREDES, ALFONSO
29351 SEEMAN, KIM

MARKUSON RD 1995

28532 QUAIL GARDENS
28561 MITCHELL, WAYNE A
28562 KUSTICH, ROBERT A



-

MODJESKA CANYON RD 1995

28202 VILORIA, BENNY
28271 HARE, DANIEL
SAMUEL, C R
28502 CORONA, EUGENE A
28592 KERSH SIGNS
28651 DAVIS, KAY
28728 ASSEMBLY SYSTEMS ENGINEERING
28730 NEWELL, BRUCE
28811 METZGER, T E
28815 MILAM, BRIAN
28890 MODJESKA COMMUNITY CTR

MARKUSON RD 1992

28532 QUAIL GARDENS
28562 KUSTICH, ROBERT A
28611 GROENDYCKE, TODD
SICHENZIA, PAUL

MODJESKA CANYON RD 1992

17391	BROWN, DANNY E
28201	EDGAR, DAVID
28202	VILORIA, BENNY H
28271	HARE, DANIEL T
28352	BURNS, G C
	FIELDS, BARRY F
28456	LEWIS, FRANK D
28502	HOLT, F
28532	SEEMAN, ROGER W
28592	KERSH, DALE L
28612	EDWARDS, JERRY
28640	MATTHEWS, RIK
28641	FRICK, BRIAN
28651	DAY, BRUCE S
28661	KLINGER, RICHARD
28681	DUNCAN, DALE W
28687	DAVLIN, J
28711	TALBOTT, J F
28721	VOGEL, FRED
28730	NEWELL, BRUCE H
28751	MCARTHUR, E
28811	BATES, GREGORY C
28815	MANCINO, DAVID S
28842	SMITH, FRED L
28852	ALBRIGHT, R
28872	BATES, GARY R
28875	WALDO, JACK
28952	BROTEMARKLE, MICHAEL
29235	GIACINTO, SAL
29252	KEENER, CLYDE
29297	SMITH, RON
29418	EDWARDS, TOM
29422	BATES, RICHARD A



MODJESKA CANYON RD 1987

MODJESKA CNYN RD
92667 ORANGE

16956	ALLEN ARCHIE E	649-2278	
17001	XXXX	00	
17071	XXXX	00	
17352	SEEMANN ROGER W	649-2321	6
17354	CAREY PATRICK J	649-2857	1
17355	XXXX	00	
17356	XXXX	00	
17391	BROWN DANNY E	649-2193	5
17398	XXXX	00	
28201	XXXX	00	
28202	VILORIA BENNY	649-2919	3
28232	XXXX	00	
28271	HARE DANIEL T	649-2990	0
28272	XXXX	00	
28331	TAYLOR CARL R	649-2646	8
28332	XXXX	00	
28352	FIELDS BARRY F	649-2454	+7
28371	KRIER MICHAEL	649-2166	6
28372	XXXX	00	
28452	XXXX	00	
28456	LEWIS FRANK D	649-2709	2
28502	HOLT FREDERICK	649-2580	1
28532	FREDETTE CHRISTA	649-2719	
	FREDETTE ED	649-2719	3
28548	GIACINTO SAL	649-2571	3
28592	★KERSH DALE L	649-2057	
	★KERSH SIGNS	649-2057	
28600	XXXX	00	
28602	XXXX	00	
28611	XXXX	00	
28614	DAVIS JOE	649-2433	
	DAVIS SHAWN	649-2433	
28621	XXXX	00	
28640	MATTHEWS RIK	649-2489	+7
28642	XXXX	00	
28651	DAY B SANFORD	649-2432	
	DAY BRUCE S	649-2432	
28661	KLINGER RICHARD	649-2507	
28672	KINSMAN FRANCINE	649-2019	
	KINSMAN JOHN	649-2019	1
28681	DUNCAN DALE W	649-2031	
28682	XXXX	00	
28687	XXXX	00	
28691	ANTENORE JAS	649-2844	1
28711	TALBOTT JEFFERSON F	649-2893	5
28721	VOGEL FRED	649-2602	
28722	MILLER DEAN BRYANT	649-2346	+7
28726	MCKAY LAMAR F	649-2217	

MODJESKA CANYON RD 1987

..MODJESKA CNYN RD		92667 CONT..
28728	GREENIG DEAN M	649-2779
28730	NEWELL BETH	649-2800
	NEWELL BRUCE H	649-2800
28732	XXXX	00
28745	HETZEL LEO	649-2963
28751	MCARTHUR ELFRIEDA	649-2220
28752	XXXX	00
28762	XXXX	00
28811	HOWELL PHYLLIS T	649-2617
	HOWELL ROBT L	649-2617
28842	SMITH FRED LEROY	649-2517
28852	ALBRIGHT R	649-2802
	ALBRIGHT S	649-2802 3
	STANTON A	649-2853 +7
28871	XXXX	00
28872	XXXX	00
28875	TEMPLE MICHAEL J	649-2563 5
28879	XXXX	00
28881	XXXX	00
28882	XXXX	00
28890	★MODJESKA COMNTY CTR	649-2428 5
28952	BROTEMARKLE FRODA	649-2570 8
	BROTEMARKLE M	649-2787 1
	BROTEMARKLE MICHAEL	649-2570
29042	WALKER C J MRS	649-2457
29074	BOICE WINCHELL F	649-2820
29122	★SANDLIN SONS&CO	649-2750
29222	XXXX	00
29252	KEENER CLYDE	649-2596
29255	XXXX	00
29257	★COOKSMITH LNDSCPNG	649-2113 +7
	SMITH RON	649-2382 +7
29275	XXXX	00
29322	★TUCKER WILDLIFE	649-2760
	★WILDLFE SNCTRY TCKR	649-2760
29371	XXXX	00
29372	CREAMER KEN	649-2987 5
29401	XXXX	00
29421	ELIAS GENE S	649-2815 4
	FRANK S R	649-2815 4
29422	BATES RICHARD A	649-2578 0
29433	XXXX	00
29442	XXXX	00
29456	XXXX	00
29459	XXXX	00
NO #	DAVIS LAWRENCE	649-2424 8
NO #	HOWARD JOHN M	649-2481
NO #	HOWARD WAYNE	649-2784 5
★	7 BUS	89 RES 6 NEW

MODJESKA CANYON RD 1982

MODJESKA CANYON RD

92667 ORANGE

17001	BOYER GARY J	649-2830	+2
17352	STINSON T L	649-2939	+2
17354	CAREY PATRICK J	649-2857	1
17355	XXXX	00	
17356	CAREY J P	649-2737	1
17398	XXXX	00	
28201	KOWALKA EARL W	649-2612	+2
28232	ROGERS JOHN	649-2459	6
28252	BRESNAHAN FRANCES	649-2744	
28271	HARE DANIEL T	649-2990	0
28272	XXXX	00	
28331	TAYLOR CARL R	649-2646	8
28332	XXXX	00	
28372	MARKUSON LORE	649-2917	1
28452	XXXX	00	
28456	LEWIS FRANK D	649-2709	+2
28502	HOLT FREDERICK	649-2580	1
28532	XXXX	00	
28548	RAHN DAVID	649-2765	S
28592	KERSH DALE L	649-2057	3
	KERSH SIGNS	649-2057	3
28602	XXXX	00	

MODJESKA CANYON RD 1982

MODJESKA CANYON RD		92667 CONT	
28611	XXXX	00	
28614	DAVIS JOE	649-2433	0
28640	XXXX	00	
28642	NEWELL CARPENTRY	649-2441	0
	NEWELL ROBT F	649-2066	6
28651	DAY B SANFORD	649-2432	3
	DAY BRUCE S	649-2432	3
28661	KLINGER RICHARD	649-2507	3
28672	KINSMAN JOHN	649-2019	1
28681	DUNCAN DALE W	649-2031	
28682	MANNING M B	649-2947	9
	MANNING R G	649-2532	9
28687	XXXX	00	
28691	ANTENORE JAS	649-2844	1
28711	HARTNETT SUSAN	649-2896	1
28721	VOGEL FRED	649-2602	6
28726	MCKAY LAMAR F	649-2217	7
28728	GREENIG DEAN M	649-2779	
28730	NEWELL BRUCE H	649-2800	8
28732	JONES L R	649-2767	1
28745	HETZEL LEO	649-2963	7
28751	MCARTHUR ELFRIEDA	649-2220	5
28752	BURBRIDGE CLIFFORD	649-2608	
28762	XXXX	00	
28811	HOWELL PHYLLIS T	649-2617	
	HOWELL ROBT L	649-2617	
28842	SMITH FRED LEROY	649-2517	
28852	XXXX	00	
28871	FORTUNE S G	649-2610	+2
	TINGLEY CHARLES	770-4586	+2
28872	XXXX	00	
28875	CORNETT J	649-2943	7
28879	BURNS PATRICK	649-2495	7
28881	RIDING CAROL B	649-2903	1
	TAIT D R	649-2449	+2
28882	XXXX	00	
28890	MODJESKA COMMNTY CT	538-9108	
28952	BROTEMARKLE M	649-2787	1
	BROTEMARKLE MICHAEL	649-2570	8
29042	WALKER C J MRS	649-2457	
29074	BOICE WINCHELL F	649-2820	7
29122	SANDLIN SONS&CO	649-2750	7
29222	XXXX	00	
29252	KEENER CLYOE	649-2596	
29255	XXXX	00	
29275	HAYES CAROLYN	649-2841	9
29322	TUCKER WILDLIFE	649-2760	
	WILDLFE SNCTRY TCKR	649-2760	
29371	XXXX	00	
29372	CREAMER K R	649-2987	+2
29401	XXXX	00	
29422	BATES RICHARD A	649-2578	0
29433	XXXX	00	
29442	XXXX	00	
29456	XXXX	00	
29459	XXXX	00	
NO #	DAVIS LAWRENCE	649-2424	8
NO #	HOWARD JOHN M	649-2481	
★	6 BUS	74 RES	8 NEW

**MODJESKA CANYON RD 1976**

MODJESKA CANYON RD 92667 ORANGE

17391	RAVENSBERG RICHARD	649-2683 5
28232	ROGERS JDHN	649-2459+6
28252	BRESNAHAN FRANCES	649-2744
28272	BEOWELL RAYMONO T	649-2408+6
28332	BETT MARCO	649-2510 2
	HELLIKER HERBERT E	649-2403
28352	XXXX	00
28372	FUNOERBURG VERNON	649-2679+6
28452	XXXX	00
28502	XXXX	00
28532	WILSON JEFF	649-2436+6
28546	SALISBURY NANCY	649-2526+6
28548	RAHN DAVIO	649-2765 5
28592	KERSH OALE L	649-2057 3
	*KERSH SIGNS	649-2057 3
28600	XXXX	00
28602	XXXX	00
28611	MACE JAS K	649-2623+6
28612	SCHULZ NAOMI A	649-2569
28614	XXXX	00
28642	GARONER BARRY	649-2876+6
	*NEWELL CARPENTRY	835-4240 5
	NEWELL ROBT F	649-2066+6
28651	OAY B SANFORO	649-2432 3
	OAY BRUCE S	649-2432 3
28661	KLINGER RICHARD	649-2507 3
28672	SAMMIS OOROTHY	649-2739
	VAUGHN KORAL	649-2739
28681	OUNCAN OALE W	649-2031
28682	MANNING R G	649-2532
28687	OAVLIN JDHN	649-2745
28691	MARCANTELLI ROBT N	649-2794
28711	XXXX	00
28721	VOGEL FRED	649-2602+6
28726	XXXX	00
28728	GREENIG OEAN M	649-2779
28730	XXXX	00
28732	WILSON RAY	649-2913+6
28745	HETSEL LEO	649-2963+6
28751	MCARTHUR ELFRIEOA	649-2220 5
28752	BURBRIOGE CLIFFORO	649-2608
28762	XXXX	00
28811	HOWELL W C	649-2617 2
28842	SMITH FRED LERDY	649-2517
28852	AURIN T A	649-2518 2
28871	XXXX	00
28872	TYLER CHAS B	649-2570 4
28879	BURNES PATRICK	649-2495+6
28882	XXXX	00
2889D	*MOOJESKA CMMNTY CTR	538-9108 2
28952	MAHAR RUTH E	649-2571 2
29042	WALKER C J MRS	649-2457
29122	XXXX	00
29222	FUNK IOA MAY	649-2695 2
29252	KEENER CLYOE	649-2596
29255	SANDERS STEVEN	649-2738 5
29322	*AUOUBON SEA&SAGE	649-2760 4

MODJESKA CANYON RD 1976

..MODJESKA CANYON RD 92667 CONT..
 *TUCKER WLOLF SNCTRY 649-2760 2
 *WILOLFE SNCTRY TCKR 649-2760
 29371 XXXX 00
 29401 MANESS K PAUL 649-2718+6
 29421 MAYER BRUNO 649-2755
 29433 XXXX 00
 29442 OONNER THOS J 649-2244+6
 29456 FLEMING NORMAN W 649-2291
 29459 XXXX 00
 NO # DUFFY EILEEN S 586-2250 2
 NO # HOWARO JOHN M 649-2481 2
 * 6 BUS 62 RES 14 NEW

MODJESKA CANYON RD 1973

MODJESKA CANYON RD 92667 ORANGE

28232	HABICH JDS	649-2776+3
28252	BRESNAHAN FRANCES	649-2744
28272	BEOWELL RAYMONO T	649-2408
28332	BETT MARCO	649-2510 2
	HELLIKER HERBERT E	649-2403
28352	KLEMPPEL DENNIS	649-2675+3
28372	SHAPIRO H	649-2520+3
28452	SANOLIN MARK	649-2281+3
28502	REYNOSD MARCIA	649-2028+3
28532	XXXX	DD
28546	XXXX	DD
28548	KOWALCHUK ORVILLE	649-2702 2
28592	KERSH OALE L	649-2057+3
	*KERSH SIGNS	649-2057+3
28600	XXXX	DD
28602	SHAW R L	649-2274+3
28611	KDHLSTEOT ALMA B	649-2425
28612	SCHULZ NAOMI A	649-2569
28614	FAIRBAIRN WM O	649-2558+3
28642	GRAY VIVIA C	649-2715
	WENOT FRANCES G	649-2066
28651	DAY B SANFORO	649-2432+3
	OAY BRUCE S	649-2432+3
28661	KLINGER RICHARD	649-2507+3
28672	SAMMIS OOROTHY	649-2739
	VAUGHN KORAL	649-2739
28681	DUNCAN DALE W	649-2031
28682	MANNING R G	649-2532
28687	OAVLIN JOHN	649-2745
28691	MARCANTELLI RDBT N	649-2794
28711	XXXX	DD
28721	CVENGROS ROBT	649-2616
28726	XXXX	DD
28728	GREENIG DEAN M	649-2779
28730	CHAMBERS WM O	649-2686
28732	VDGEL FRED	649-2602
28745	EDWARDS JUNE	649-2257+3
28751	MARTHUR NELSON	649-2220
28752	BURBRIDGE CLIFFORO	649-2608
28762	WILSON HARRY W REV	649-2556
28811	HOWELL W C	649-2617 2
28842	SMITH FRED LEROY	649-2517
28852	AURIN T A	649-2518 2
28882	THDMAS PATRICIA M	649-2560+3
28890	*MOJESKA CMMNTY CTR	538-9108 2
28952	MAHAR RUTH E	649-2571 2
29042	WALKER C J MRS	649-2457
29122	MAUS PHILLIP	649-2422+3
29222	FUNK IDA MAY	649-2695 2
29252	KEENER CLYDE	649-2596
29322	*TUCKER WLOLF SNCTRY	649-2760 2
	*WILOLFE SNCTRY TCKR	649-2760
29371	*OOET CLUB	649-2251
29421	MAYER BRUNO	649-2755
29433	CARTER MARY C	649-2749
29456	FLEMING NDRMAN W	649-2291
29459	XXXX	DD
	NO # OUFFY EILEEN S	586-2250 2
	NO # HOWARD JOHN M	649-2481 2
	* 5 BUS 54 RES 15 NEW	

Appendix G Site Reconnaissance Photos, July 16, 2020

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Modjeska Canyon Road Bridge (No. 55C0172) Replacement Project

ISA Site Visit – July 16, 2020



Photo 1. Modjeska Canyon Road Bridge (No. 55C0172) (Bridge), looking south over Santiago Creek, a utility pipe runs parallel to the west railing; metal guard rail is rusted with peeling yellow paint and damaged concrete curb. Concrete and asphalt along this Bridge are weathered.



Modjeska bridge-South approach-looking North
7/16/20, 11:18

Photo 2. South approach of Bridge looking south; bots dots and yellow and white traffic striping on this Bridge. Treated wood utility poles with power lines cross the Bridge.



200ft west of approach - looking east
7/16/20, 10:34



200ft west of approach-looking west
7/16/20, 10:35

Photo 3. West side of Bridge; yellow and white traffic striping, treated wood utility poles with transformers and power lines cross Modjeska Canyon Road.



Photo 4. Centerline of Bridge looking west (left) and east (right).



Photo 5. Western side of Bridge, looking east; utility poles with power lines crossing the Modjeska Canyon Road. There is an outcropping to the north of the utility poles.



Photo 6. Looking east; a fire hydrant is located approximately 20 feet west of the Bridge.



Photo 7. Survey marker on the northeast side of the east railing.



Photo 8. Weather station located on the northeast side of the Bridge.



Photo 9. East side of the Bridge, looking south; treated wood posts and peeling yellow paint along guard rail.



Photo 10. South side of Bridge looking north (left) and south (right); residential properties border the southeast corner of the Project site.



Photo 11. Southwest side of the Bridge; stormwater flows through concrete-lined culverts and ditches.



Potential staging area-west will f approach
7/16/20, 10:37



Staging area used as drive and round-about
7/16/20, 12:32

Photo 12. Western side of Bridge, looking west; potential staging area with western forward approach is currently used as drive and round-about.



Potential staging-southwest side
7/16/20, 11:32



Possible abandoned well in staging field
7/16/20, 11:33

Photo 13. Southwest side of the Bridge; potential staging area. There is a possibly abandoned well within the field.



Photo 14. South side of the Bridge, looking south (top left), southeast (bottom left), and southwest (top right); the retaining wall at the southeast corner is exposed (bottom right).



Monitoring Station -Northeast side-looking North
7/16/20, 11:46

Photo 15.Northeast side, looking north; there is a monitoring station.



Photo 16. Looking northeast from the staging area slope (bottom left); the northeast corner buttress (top left); northwest corner buttress is exposed (top middle, top right); giant outcropping under the north side buttress. Utility poles run along the western and northern sides of the Bridge.

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Appendix H Caltrans Checklist

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Initial Site Assessment (ISA) Checklist

Project Information

District _____ County _____ Route: _____ Post Mile _____ EA _____

Description: MODTESKA CANYON RD BRIDGE

Is the project on the HW Study Minimal-Risk Projects List (HW1)?

Project Manager _____ phone # _____

Project Engineer _____ phone # _____

Project Screening

Attach the project location map to this checklist to show location of all known and/or potential HW sites identified.

1. Project Features: New R/W? No Railroad Involvement? No
Structure demolition/modification? YES Subsurface utility relocation? YES
2. Project Setting: MODTESKA CYN. RD. BRIDGE OVER CREEK
Rural or Urban RURAL
Current land uses LOCAL ROAD FOR VEHICLE, DELIVERY, BIKES, PEDESTRIANS
Adjacent land uses RESIDENTIAL
(industrial, light industry, commercial, agricultural, residential, etc.)
3. Check federal, State, and local environmental and health regulatory agency records as necessary, to see if any known hazardous waste site is in or near the project area. If a known site is identified, show its location on the attached map and attach additional sheets, as needed, to provide pertinent information for the proposed project.
4. Conduct Field Inspection: Date 07-16-20 Use the attached map to locate potential or known HW sites.

STORAGE STRUCTURES / PIPELINES:

Underground tanks Not observed Surface tanks PROPANE @ RESIDENCES.

Sumps Not observed Ponds Not observed

Drums Not observed Basins Not observed

Transformers on poles Landfill Not observed

Other 8" ϕ H₂O line on WEST RAIL of Bridge.

Ⓢ POSSIBLE SEPTIC / LEACH FIELD AT RESIDENCES.

Initial Site Assessment (ISA) Checklist (continued)

CONTAMINATION: (spills, leaks, illegal dumping, etcetera)

Surface staining minor - on pavement Oil sheen Not observed
Odors Not observed Vegetation damage Not observed
Other Occasional surface litter

HAZARDOUS MATERIALS: (asbestos, lead, etcetera)

Buildings WEATHER STATION Spray-on fireproofing Unknown
Pipe wrap Unknown Friable tile Unknown
Acoustical plaster Unknown Serpentine N/A
Paint ROAD STRIPING Other _____

5. Additional record search, as necessary, of subsequent land uses that could have resulted in a hazardous waste site. Use the attached map to show the location of potential hazardous waste sites.

6. Other comments and/or observations: SEE PHOTOS

ISA Determination

Does the project have potential hazardous waste involvement? YES If there is known or potential hazardous waste involvement, is additional ISA work needed before task orders can be prepared for the Investigation? No If "YES," explain; then give an estimate of additional time required: _____

NW STAGING AREA USED AS VEHICLE ROUND-ABOUT
& VEHICLE PARKING
SW STAGING AREA IS PRIVATE PROPERTY W/ POSSIBLE
Abandoned Well. STORMWATER RUNOFF RUNS TO CREEK.

A brief memorandum should be prepared to transmit the ISA conclusions to the Project Manager and Project Engineer.

ISA Conducted by W.B. Coiro Date 07/16/2020

 Project Area
 Potential Staging Area
Project Features
 Bridge
 Edge of Pavement
 Bridge Footings
 Grading Limits



\\1836 - 11th\SI\Bridges\Cultural\F2_Loc_10-12-10.mxd

Source: ESRI World Street Maps Online; Dokken Engineering 4/24/2020; Created By: hsheldon



1 inch = 100 feet

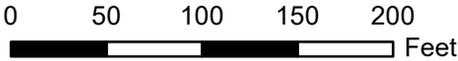


FIGURE 3
Project Features

BRLO-5955(094)
Modjeska Canyon Road Bridge Replacement Project
Modjeska Canyon, Orange County, California



INITIAL SITE RECONNAISSANCE CHECKLIST

Project Number	Date of Site Visit 7-16-20
Project Name MODTESKA CANYON	County ORANGE
Weather/Limiting Conditions 80° CLEAR, CALM	Client
Project Description (roadway <u>bridge</u> , intersection, etc.)	Field Inspector WBC

Part 1. Land Use that Indicate Potential for Hazardous Materials. Land use activities that have the potential to generate hazardous wastes, including on-site chemical or fuel storage facilities, either on or adjacent to the Project site. Check if any of the following is observed:

Gas stations	Chemical manufacture, formulation, or processing.
Repair and maintenance of motor vehicles (automobiles, aircraft, trucks, construction equipment, RVs, etc.).	Chemical & petroleum product storage facilities (above- and under-ground tanks and flammable storage rooms)
Photographic processing or printing.	Analytical laboratory operations.
Provision of home, industrial, or commercial pest control.	Dry-cleaning and laundry services.
Warehouse operations.	Cosmetic manufacturing or processing.
Home, garden, pool, or agricultural supply manufacturing.	Textile mfg. (including fabric dyeing and finishing).
Manufacture, refinishing, or stripping of furniture or wood products.	Manufacture, formulation, or processing of pesticides or agricultural products or chemicals.
Chemical treatment of lawns, gardens, yards, or other landscape and tree services.	Metal finishing, refinishing, and etching (auto body, printed circuit board manufacturing, jewelry fabrication).
Building and repair of boats.	Production and repair of shoes.
Paint formulation and mixing.	Metal galvanizing.
Drum, barrel, and tank reconditioning.	Battery manufacturing, rebuilding, or recycling.
Solvent recycling.	Scrap metal and junk yard operations.
Pressure treating or preserving of wood products.	Landfills.
Facilities that receive bulk deliveries of raw or processed materials	Schools, auditoriums and other facilities with large heating requirements.
Nursery and greenhouse operations.	Waste or spent production incineration.
Recycling facilities.	Foundries.
Railroad corridors.	

Part 2. Specific physical features that may be indicators of potential contamination. Check if any of the following is observed:

Unnatural, sunken/depressed or raised areas.	<input checked="" type="checkbox"/> Tanks, pits, lagoons, or ditches. Propane Tanks @ Residences.
Surface water plumes or sheens.	Waste material piles.
Raw material storage piles.	Barrels or other storage containers.
Security fencing and protected areas.	Landfills and areas used for burning.
Loading ramps and railroad staging areas.	Filled areas.
Pumping manifolds.	Fill pipes or other pipes projecting out of the ground.

Part 3. Land surface characteristics that may indicate problems. Check if any of the following is observed:

Color variations in soils or stained soils.	Barren soil areas.
<input checked="" type="checkbox"/> Exposed and graded soils.	Obvious changes in vegetation density.
<input checked="" type="checkbox"/> Drainage patterns bringing drainage from off-site.	Dead trees and shrubs.
STORMWATER FLOWS TO CREEK	Barren vegetation adjacent to live vegetation.

Part 4. Building features and equipment that may indicate problems. Check if any of the following is observed:

Asbestos-containing materials, such as pipe insulation, ceiling or floor tile, transit board, sprayed-on fireproofing, etc.	Electrical transformers.
	Floor drains.
	Hydraulic equipment.





Project Information		
Property Location		
General Setting	Industrial	
	Commercial/	
	Residential	RURAL RESIDENTIAL
	Mix-Use	
	Agricultural	
	Other	
Owner of the Property		
Property Type	Roadway	
	Bridge	VEHICLES, BIKES, PEDESTRIANS
	Highway	
	Intersection	
	Vacant Lot	
	Open Space	
	Commercial Area	
	Residential Area	
	Other	
Other Pertinent Information		
Property Improvement & Building/Land Description		
Property Location		
Access to Property		
Lot Size & Shape		
Building Size & Shape		
Bridge type	VEHICLES, BIKES, PEDESTRIANS	
Year Built		
Current Occupants & Use of the Property		
Present Occupant/Business Operation		
Number of Occupants/Units/Tenants		
Municipal Service & Utilities		
Source of Potable Water	MUNICIPAL	
Gas/Oil Source for Heating		
Electrical Source	OVERHEAD POWER LINES	
Sewage Disposal System	POSSIBLE SEPTIC / LEACH FIELD	
Solid Waste Disposal	MUNICIPAL PICK-UP	
Subject property reconnaissance		
ITEM	LOCATION AND DESCRIPTION	
Processes that generate or handle Petroleum Products or		
Underground Storage Tank		
Aboveground Storage Tank	RESIDENTIAL PROPANE	
Fuel Islands / Dispensers		



Any type of fueling systems	
Containers of Hazardous Material & Petroleum Products	
Other containers of suspicious hazardous materials in	
Containers not attributed to current use of the Subject	
Wastewater Treatment Units & Clarifiers	
Project Area Reconnaissance	
ITEM	LOCATION AND DESCRIPTION
Pools of liquid	
Drains and Sumps	
Any regulated surface wastewater discharges	
Storm water or surface-water drainage system having any	Flow from SW to Creek ; curb + gutter
Any stained catch basins, drip pads, or sumps	
Visual indication of Herbicides & Pesticides use to pose	
Visual evidence of leak or contamination from septic	
Wells (any irrigation wells, injection wells, abandoned	Possible Abandoned Well in area
Railroad tracks or spurs	suggested for Staging SW of bridge
Visual evidence of improper handling/disposal or solid	
Other visual evidence of spills, leakage, staining,	
Dry-cleaning operation on site	
Environmental Permits, NPDES, Hazardous	
Compliance records, permits and plans, etc. in relation to	
Permits, Licenses & Registrations for Current & Past and	
Non-CERCLA Items	
ITEM	LOCATION AND DESCRIPTION
Suspicious asbestos-containing materials in damaged	
Suspicious lead-based paint in damaged condition if the	
Lead in drinking water	
Radon gas concern	
Visual evidence of Urea Formaldehyde	
Suspicious PCB-oil concern with hydraulic equipment,	
Non-CERCLA Items	
ITEM	LOCATION AND DESCRIPTION
Wetland, creeks, swale, pits, ponds, lagoons, or any other	CREEK
Visual evidence of mold problems from wet areas, roof	
Air quality problems (unusual smells, obnoxious odors, or	
Is the property under flood zone (FEMA)	
Adjacent Properties	
ITEM	NAME, ADDRESS, TEL, TYPE OF BUSINESS, Roadway, Street, Public Thoroughfare, River, Or Stream.
North	Weather Station c. NE corner of Bridge
South	Residence c. Bridge Approach - South Side
West	CREEK & VEGETATION
East	CREEK & VEGETATION





WRECO

1243 Alpine Road, Suite 108
Walnut Creek, CA 94596
Phone: 925.941.0017
Fax: 925.941.0018
www.wreco.com

The purpose of the site reconnaissance is to document visual and/or physical observations, defined as observations made by vision and observations made by the sense of smell (particularly noxious or foul odors).	
By signing below, I hereby certify that the above information is true and correct to the best of my knowledge.	
Name of Preparer	WALTER B. CRAIG
Based on the above information, I recommend:	
Signature	W.B. Craig
Date	7-16-2020

