

**Natural Environment Study  
(Minimal Impacts)**

County of Orange, California  
Cities of San Juan Capistrano and Unincorporated San Juan Capistrano, California  
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STATE OF CALIFORNIA  
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## **List of Abbreviated Terms**

°C	degrees Celsius
°F	degrees Fahrenheit
amsl	above mean sea level
ANSI	American National Standards Institute
ARTO	arroyo toad
BMPs	best management practices
BSA	Biological Study Area
CAGN	coastal California gnatcatcher
Cal-IPC	California Invasive Plant Council
Caltrans	California Department of Transportation
CCC/LCP	California Coastal Commission/Local Coastal Program
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CIPP	cured-in-place pipeliner
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
Commission	California Fish and Game Commission
County	County of Orange
CRPR	California Rare Plant Rank
CSS	coastal sage scrub
CWA	Clean Water Act
CWS	Curve Warning Signs
D12	District 12
DBH	diameter at breast height
EMP	Environmental Mitigation Program
EO	Executive Order
ESA	Environmentally Sensitive Area
ESU	Evolutionarily Significant Unit

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FAST Act	Fixing America's Surface Transportation Act
FES	flared end sections
FESA	federal Endangered Species Act
FHWA	Federal Highway Administration
HCP	Habitat Conservation Plan
HDD	horizontal directional drilling
HUC	Hydrologic Unit Code
I-15	Interstate 15
I-5	Interstate 5
I-80	Interstate 80
IPaC	Information for Planning and Consultation
ISA	International Society of Arboriculture
JD	Jurisdictional Delineation
JDSA	Jurisdictional Delineation Study Area
LBVI	least Bell's vireo
M2 NCCP/HCP	Measure M2 Natural Community Conservation Plan/ Habitat Conservation Plan
MBTA	Migratory Bird Treaty Act
MGS	metal guardrail system
MUTCD	Manual on Uniform Traffic control Devices
NCCP	Natural Community Conservation Plan
NCCP/HCP	Natural Community Conservation Plan / Habitat Conservation Plan
NEPA	National Environmental Policy Act
NES(MI)	Natural Environment Study (Minimal Impacts)
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOAA Fisheries	National Oceanic and Atmospheric Administration National Marine Fisheries Service
NPPA	California Native Plant Protection Act
OCTA	Orange County Transportation Authority
PM	Post Mile
Porter-Cologne Act	Porter-Cologne Water Quality Control Act

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project	SR-74 Multi-Asset Management Project
RHMA-G	Rubberized Hot Mix Asphalt-Type G
ROW	right-of-way
RSP	rock slope protections
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SAMP	Special Area Management Plan
SB	Senate Bill
SHOPP	State Highway Operation and Protection Program
SR-241	State Route 241
SR-58	State Route 58
SR-74	State Route 74
SWRCB	State Water Resources Control Board
SWWF	southwestern willow flycatcher
U.S.	United States
USACE	United States Army Corps of Engineers
USC	United States Code
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WEAP	Worker Environmental Awareness Program
WOTS	waters of the State
WOTUS	waters of the United States

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## **1. Introduction**

This Natural Environment Study (Minimal Impacts) (NES[MI]) has been prepared to support the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) documentation for the Multi-Asset Management Project on State Route 74 (SR-74) from the SR-74/Interstate 5 (I-5) separation (Post Mile [PM] 0.0) to 1.0 mile east of San Juan Creek (PM 11.5) in Orange County, including San Juan Capistrano and the County's unincorporated area (see Figure 1, Regional and Project Location [4 sheets]; all figures are provided in Appendix A).

### **1.1 Project History**

The 2024 State Highway Operation and Protection Program (SHOPP) Asset Management Program refined project prioritization parameters by incorporating the California Department of Transportation (Caltrans) Strategic Management Plan. The 2024 SHOPP cycle replaced the program-specific funding allocation with a total Performance Target that incentivizes multi-objective projects. This project was initiated under the District 12 (D12) Asset Management Program under the 2024 SHOPP, and its anticipated delivery is in Fiscal Year 2026/2027. This project consists of six (6) asset classes, emphasizing roadway, safety devices, and complete street improvements. The project is located in Orange County, from the SR-74/I-5 separation to 1.0 mile east of San Juan Creek (PM 0.0/11.5).

#### **1.1.1 Purpose and Need**

The primary purpose of this multi-assets project is to improve ride quality, reduce recurrent maintenance activities, enhance road safety, and provide safe transportation facilities to the commuters. This segment of SR-74, PM 0.0/11.5, has experienced inadequate roadway conditions and has been operating with incomplete and disconnected transportation management systems.

### **1.2 Project Description**

The SR-74 multi-asset management project is located along SR-74 from SR-74/I-5 separation (PM 0.0) to 1.0-mile east of San Juan Creek (PM 11.5), in Orange County, including the city of San Juan Capistrano and an unincorporated area of Orange County. The project proposes to address a range of improvements, including roadway, traffic safety devices, complete street elements, and drainage systems.

#### **1.2.1 Build Alternative-Programmable Project Alternative**

- **Roadway Improvements-Pavement Rehabilitation:** Pavement rehabilitation is proposed to improve the existing pavement on SR-74, from the SR-74/I-5 separation (PM 0.0) to 1.0 mile east of San Juan Creek (PM 11.5), excluding the segments at PM 1.0/2.1, which are included in project 08692. The proposed pavement work includes cold planning and overlaying existing asphalt concrete

on general-purpose lanes and shoulders. The proposed pavement is 0.2 feet of the Rubberized Hot Mix Asphalt-Type G (RHMA-G).

Additional works to accommodate the proposed pavement rehabilitation include upgrading and restoring existing loop detectors within the pavement improvement limits and upgrading existing pavement delineation in accordance with Caltrans Standard Plans and Specifications.

- **Roadway Improvements-Drainage Rehabilitation:** Drainage improvement is proposed for a restoration of 168 feet (ft) of 3 existing pipe segments on SR-74, at various locations throughout the project limits, PM 0.0/11.5. The proposal includes performing cured-in-place pipeliner (CIPP) and flared end sections (FES). All work will be performed within the Caltrans right-of-way (ROW). **Curve Warning Signs (CWS):** Adding curve warning signs is proposed and would add 54 curve warning signs on SR-74 at various locations, PM 5.41/8.18. All work will be performed within Caltrans ROW. Each of the proposed signs will be installed on a 6 by 8 inch pole approximately within 6 ft from the edge of pavement. The poles will be installed in a manner to avoid any impacts to trees.

#### **1.2.1.1 Traffic Safety Device Improvements**

The primary purpose of upgrading traffic safety devices is to enhance safe transportation facilities to the commuters. Traffic safety device improvements are proposed as follows:

- **Metal Guardrail System:** Upgrading the existing metal guardrail system (MGS) is proposed and would upgrade four existing MGS on SR-74 at PM 10.4. All work will be performed within Caltrans ROW.

#### **1.2.1.2 Complete Street Improvements**

The primary purpose of upgrading complete street elements is to enhance safe transportation facilities to commuters, including pedestrian and bike riders. Various complete street improvements are proposed as follows:

- **Upgrading Ladder Crosswalks:** Upgrading ladder crosswalks is proposed and would upgrade ladder crosswalks at five locations on SR-74 throughout the project limits (PM 0.0/11.5). All work will be performed within Caltrans ROW.
- **Adding 2-Foot Buffer:** Adding a 2-foot buffer is proposed and would add a 2-foot buffer between the existing general-purpose lane and the Class II bike lane (PM 2.0/3.0). The existing bike lane on both directions will be restriped to accommodate the proposal as shown in the Manual on Uniform Traffic Control Devices (MUTCD), specifically Chapter 9C-Markings, Figure 9C-104 of MUTCD. All work will be performed within Caltrans ROW.
- **Adding Class II Bike Lane Pavement Markings:** Adding Class II bike lane pavement markings is proposed and would add Class II bike lane markings every

500 feet in both directions (PM 1.9/2.8). All work will be performed within Caltrans ROW.

### **1.2.2 No-Build Alternative**

Under the No-Build Alternative, no construction or improvements would be made to the existing SR-74. This alternative would not provide road improvements to SR-74, and it is contrary to Caltrans' goal on State highways. As a result, the No-Build Alternative is not consistent with the need and purpose of this project. This alternative provides a baseline for comparison of environmental impacts under the Build Alternative. This alternative does not preclude the construction of future improvements.

A Biological Study Area (BSA) was established to evaluate potential direct and indirect project-related effects on sensitive biological resources. The BSA encompasses the project limits. Figure 2, Proposed Project Components (13 sheets), shows the location of the project ROW and the project limits on high-definition aerial photographs taken in May 2025.

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## **2. Study Methods**

### **2.1 Regulatory Requirements**

#### **2.1.1 Review of Jurisdiction Subject to Section 401 of the Clean Water Act and the California Porter-Cologne Water Quality Control Act**

The Regional Water Quality Control Board (RWQCB) is responsible for the administration of Section 401 of the Clean Water Act (CWA). The RWQCB also asserts authority over waters of the State under waste discharge requirements pursuant to the California Porter-Cologne Water Quality Control Act (Porter-Cologne Act). The definition of waters under the jurisdiction of the State of California is broad and includes any surface water or groundwater, including saline waters, within the boundaries of the State. Waters that meet the definition of waters of the United States (WOTUS) are also considered waters of the State, but the jurisdictional limits of waters of the State may extend beyond the limits of WOTUS. Isolated waters that may not be subject to regulations under federal law are considered to be waters of the State and regulated accordingly. While there is no formal statewide guidance for the delineation of nonwetland waters of the State, jurisdiction generally corresponds to the surface area of aquatic features that are at least seasonally inundated, and all areas within the banks of defined rivers, streams, washes, and channels, including associated riparian vegetation. Currently, each RWQCB reserves the right to establish criteria for the regulation of nonwetland waters of the State.

In order to be considered a jurisdictional wetland water of the State, an area must meet the definition set forth in the State Water Resources Control Board's (SWRCB) *2020 State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*, which defines wetlands as having (1) continuous or recurrent saturation of the upper substrate caused by groundwater or shallow surface water, or both; (2) hydric substrates; and (3) the area's vegetation is dominated by hydrophytes or lacks vegetation. Each characteristic must meet a specific set of mandatory wetland criteria.

The discharge of dredged or fill material (temporarily or permanently) into waters of the State (including wetlands) requires authorization from the RWQCB pursuant to Section 401 of the CWA or pursuant to the Porter-Cologne Act in the absence of WOTUS.

#### **2.1.2 Review San Juan Creek/Western San Mateo Creek Watershed Special Area Management Plan (San Juan Creek SAMP)**

The project area is located within the USACE San Juan Creek/Western San Mateo Creek Special Area Management Plan (SAMP) area and will require permitting under the SAMP. This alternative permitting process allows for development while also providing contextually appropriate aquatic resource protection. The SAMP for the San Juan Creek Watershed was developed and approved by the USACE in cooperation with the County of Orange. The U.S. Army Corps of Engineers (Corps),

Los Angeles District proposes to establish an alternate permitting process involving the following features: a new Regional General Permit (RGP); two new Letter of Permission (LOP) procedures for activities that would not substantially affect aquatic resource functions and values with proposed long-term protection and management actions; and the revocation of selected Nationwide Permits (NWP).

### **2.1.3 Review of Jurisdiction Subject to Section 404 of the Clean Water Act**

The United States Army Corps of Engineers (USACE) regulates discharge of dredged or fill material into WOTUS. These waters include wetlands and nonwetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. The USACE regulatory jurisdiction, pursuant to Section 404 of the CWA and current regulatory definitions, is founded on a direct intermittent or perennial hydrological surface connection between the water body in question and waters subject to interstate commerce during typical years. In order to be considered a jurisdictional wetland under Section 404, an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Each characteristic must meet a specific set of mandatory wetland criteria. Based on the recent Supreme Court decision of *Sackett v. Environmental Protection Agency* on May 25, 2023, the Supreme Court ruled that the CWA extends only to wetlands that have a continuous surface connection with “waters” of the United States (i.e., with a relatively permanent body of water connected to traditional interstate navigable waters).

### **2.1.4 Federal Endangered Species Act**

Under provisions of Section 7(a)(2) of the Federal Endangered Species Act (FESA), a federal agency that permits, licenses, funds, or otherwise authorizes a project activity must consult with the United States Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NMFS) if the activity may affect a listed endangered or threatened species or its designated critical habitat. The purpose of this consultation is to ensure that a federal agency’s actions would not jeopardize the continued existence of any listed species or destroy or adversely modify critical habitat. Chapter 4 of this NES(MI) provides details regarding the project and federally listed plant and wildlife species known to occur in the project vicinity.

### **2.1.5 Migratory Bird Treaty Act**

Native bird species and their nests are protected under the Migratory Bird Treaty Act (MBTA) (16 United States Code [USC] 703–712). The MBTA states that all migratory birds and their parts (including eggs, nests, and feathers) are protected. The MBTA prohibits the take, possession, import, export, transport, sale, purchase, barter, or offering for sale, purchase, or barter, of any migratory bird or its eggs, parts, or nests, except as authorized under a valid permit.

This treaty with Canada, Japan, Mexico, and Russia makes it unlawful to pursue, hunt, take, capture, or kill migratory birds. Section 1439 of the Fixing America's Surface Transportation Act (FAST Act) provides a temporary conditional authorization of take under the MBTA for nesting swallows on certain bridges.

#### **2.1.6 Executive Order 11990—Protection of Wetlands**

Executive Order (EO) 11990 establishes a national policy to avoid adverse impacts on wetlands whenever there is a practicable alternative.

#### **2.1.7 Executive Order 13112—Invasive Species**

On February 3, 1999, President Clinton signed EO 13112, requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as:

“... any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health.”

Federal Highway Administration (FHWA) guidance issued August 10, 1999, directs the use of the State's noxious weed list to define the invasive plants that must be considered as part of the National Environmental Policy Act (NEPA) analysis for a proposed project.

#### **2.1.8 California Endangered Species Act**

The California Endangered Species Act (CESA) is administered by the California Department of Fish and Wildlife (CDFW) and prohibits the “take” of plant and animal species identified as either threatened or endangered in the State of California by the Fish and Game Commission (California Fish and Game Code Sections 2050–2097). “Take” is defined to mean hunt, pursue, catch, capture or kill or to attempt those activities. Sections 2080.1 and 2081 of CESA allow the CDFW to authorize exceptions to the “take” prohibition for State-listed threatened or endangered plant and animal species for purposes such as public and private development provided the take is incidental to an otherwise lawful activity and the take is minimized and fully mitigated.

#### **2.1.9 Fully Protected Species**

Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code designate 37 fully protected species and prohibit the take or possession at any time of such species with certain limited exceptions.

#### **2.1.10 Bird Protections**

Sections 3503, 3503.5, and 3513 of the California Fish and Game Code protect birds. Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by code or any regulation made pursuant thereto. Section 3503.5 prohibits the take, possession, or destruction of any nests, eggs, or birds in the orders Falconiformes (New World vultures, hawks, eagles, ospreys, and falcons, among others) or Strigiformes (owls). Section 3513 prohibits the take or possession of any migratory nongame bird or part thereof, as designated in the MBTA. To avoid violation of the take provisions, it is generally required that project-related disturbances at active nesting territories be reduced or eliminated during the nesting cycle.

#### **2.1.11 Review of Jurisdiction Subject to Section 1600 of the California Fish and Game Code**

Section 1600 et seq. of the California Fish and Game Code requires notifying the CDFW prior to any project activity that might (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material where it may pass into any river, stream, or lake. If, after this notification, the CDFW determines that the activity may substantially adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement will need to be obtained. The CDFW has not defined wetlands for jurisdictional purposes. The CDFW generally includes within the jurisdictional limits of streams and lakes any riparian habitat present. Typical riparian habitat includes willows, alders, sycamores, cottonwoods, and other vegetation associated with stream banks or lake shorelines. In most situations, wetlands associated with a stream or lake would fall within the limits of riparian habitat. Thus, defining the limits of CDFW jurisdiction based on riparian habitat will automatically include any wetland areas. Wetlands not associated with a lake, stream, or other regulated areas generally are not subject to CDFW jurisdiction.

#### **2.1.12 California Native Plant Protection Act**

The California Native Plant Protection Act (NPPA) requires all State agencies to use their authority to carry out programs to conserve endangered and rare native plants. The NPPA gives the CDFW the power to designate native plants as “endangered” or “rare” and prohibits the take of such plants, with certain exceptions.

#### **2.1.13 Natural Communities Conservation Planning Act**

The Natural Communities Conservation Planning Act was enacted to encourage broad-based planning to provide for effective protection and conservation of the State’s wildlife resources while continuing to allow appropriate development and growth. Natural Community Conservation Plans (NCCPs) may be implemented that identify measures necessary to conserve and manage natural biological diversity



within the planning area, while allowing compatible and appropriate economic development, growth, and other human uses.

The three NCCP/HCP in Orange County are; the Southern Subregion Habitat Conservation Plan (HCP), the Central-Coastal Subregion NCCP/HCP, and the Orange County Transportation Authority (OCTA) Measure 2 NCCP/HCP (M2 NCCP/HCP). These plans represent collaborative planning efforts among a variety of parties, including landowners, developers, local governments, and resource agencies. The plans typically cover a variety of habitat types and plant and animal species, designate conservation areas, and provide regulatory processes for plan signatories (and, in some cases, nonparticipating landowners such as the California Department of Transportation [Caltrans]) for projects impacting covered resources within specific land designations. The majority of the proposed project occurs within the Southern Subregion Habitat Conservation Plan (HCP). However, the project is not covered under any of these plans and is located outside of any NCCP/HCP-designated reserve area.

#### **2.1.14 Senate Bill 857—Fish Passage**

Senate Bill (SB) 857 was enacted into law January 1, 2006. This bill amends Article 3.5 of the Streets and Highways Code, detailing requirements for assessing and remediating barriers to fish passage at stream crossings along the State Highway System that currently or historically supported anadromous fish. SB 857 requires all projects that affect an anadromous fish stream to perform a fish passage assessment in accordance with the National Oceanic and Atmospheric Administration (NOAA) and CDFW (as well as Caltrans) guidelines prior to the commencement of project design and to submit these findings to the CDFW. If it is determined that a project structure does or would block fish passage, the project is required to remediate the blockage.

#### **2.1.15 Magnuson-Stevens Fishery Conservation and Management Act**

The Magnuson-Stevens Fishery Conservation and Management Act of 1976 was established to conserve and manage fishery resources found off the coast, as well as anadromous species and Continental Shelf fishery resources of the United States, by exercising (a) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983; and (b) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, Continental Shelf fishery resources, and fishery resources in special areas.

#### **2.1.16 Orange County Southern Subregion Habitat Conservation Plan**

The Orange County Southern Subregion HCP was approved in 2007 for a 75-year permit pursuant to Section 10(a)(1)(B) of FESA.

The Southern Subregion HCP designates a preservation area totaling 32,818 acres and provides a conservation strategy for 10 sensitive vegetation communities and 7

federally listed species known to occur in the region, including the arroyo toad (*Bufo californicus*) and coastal California gnatcatcher (*Polioptila californica californica*).

The County, in conjunction with Rancho Mission Viejo and the Santa Margarita Water District, initiated preparation of a Southern Subregion HCP; however, the plan was not approved by the CDFW, so it is being implemented as an HCP that was approved by the USFWS.

Because Caltrans did not contribute funding or lands to the development of the HCP and Reserve System, it is considered to be a nonparticipating landowner. Therefore, potential adverse effects to listed species covered in the Southern Subregion HCP, particularly the arroyo toad and coastal California gnatcatcher, will require a Section 7 consultation with the USFWS.

### **2.1.17 Magnuson-Stevens Fishery Conservation and Management Act**

The Magnuson-Stevens Fishery Conservation and Management Act of 1976 was established to conserve and manage fishery resources found off the coast, as well as anadromous species and Continental Shelf fishery resources of the United States, by exercising (a) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983; and (b) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, Continental Shelf fishery resources, and fishery resources in special areas.

## **2.2 Studies Required**

### **2.2.1 Literature Search**

A literature review and records search was conducted in August 2025 to identify the existence or potential occurrence of sensitive or special-status biological resources (e.g., plant and animal species) in or within the vicinity of the improvements related to the build alternatives. Federal and State lists of sensitive species were examined and are included in Appendix B, Federal and State Lists of Sensitive Species. Current and historical aerial photographs were also reviewed on Google Earth (Google Earth 2025). Current database records that were reviewed included the following:

- United States Fish and Wildlife Service (USFWS). Information for Planning and Consultation (IPaC). Website: <https://ecos.fws.gov/ipac/> (accessed August 2025) (USFWS 2025a).
- National Oceanic and Atmospheric Administration (NOAA). Website: [https://archive.fisheries.noaa.gov/wcr/maps\\_data/california\\_species\\_list\\_tools.html](https://archive.fisheries.noaa.gov/wcr/maps_data/california_species_list_tools.html) (accessed August 2025) (NOAA 2025).
- CDFW California Natural Diversity Database (CNDDB), RareFind 5. California 7.5-minute United States Geological Survey (USGS) quadrangles searched: *EI*

*Toro, Santiago Peak, Alberhill, Sitton Peak, Cañada Gobernadora, San Juan Capistrano, Margarita Peak, San Clemente, and Dana Point.* Website: <https://wildlife.ca.gov/Data/CNDDDB> (accessed August 2025) (CDFW 2025b).

- California Native Plant Society (CNPS), Rare Plant Program. Inventory of Rare and Endangered Plants (online edition, v9.5). California 7.5-minute USGS quadrangles searched: *El Toro, Santiago Peak, Alberhill, Sitton Peak, Cañada Gobernadora, San Juan Capistrano, Margarita Peak, San Clemente, and Dana Point.* Website: <http://www.rareplants.cnps.org> (accessed August 2025) (CNPS 2025).

Prior biological resources survey data and environmental reports prepared for projects at or near the proposed project location were also reviewed.

### 2.2.2 Survey Methods

On-site field investigations were conducted from May 2025 through August 2025 to identify existing vegetation communities, suitable habitats for special-status species, potential jurisdictional waters, and other biological resources of concern. Based on the literature review and initial field investigations, field surveys were completed as follows:

- **General Habitat Suitability Survey:** LSA biologists noted wildlife species and habitat conditions within the BSA during the course of general biological surveys conducted May–September 2025. All plant and wildlife species observed during the surveys were documented and are included in Appendix C, Plant and Animal Species Observed.
- **Vegetation/Natural Communities:** Vegetation/natural communities and land cover types existing within the BSA were mapped and classified based on existing conditions at the time of the surveys using the habitat classes described in the Methods Used to Survey the Vegetation of Orange County Parks and Open Space Areas and the Irvine Company Property, developed for the County of Orange Environmental Management Agency and Environmental Planning Division (Gray and Bramlet 1992, Jones & Stokes Associates, Inc. 1993) (see Table 2 in Chapter 3).
- **Jurisdictional Delineation:** A jurisdictional delineation (JD) was conducted in accordance with approved methods outlined in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0* (USACE 2008), the USACE 1987 *Corps of Engineers Wetland Delineation Manual* (USACE 1987), the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (SWRCB 2020), and other relevant agency guidelines. The fieldwork for this evaluation was conducted on various dates from May through September 2025, by LSA biologists Denise Woodard, Christina Van Oosten, and Carla Cervantes. Prior to conducting the fieldwork, high-resolution aerial photographic imagery was

reviewed to identify potential jurisdictional features in the Jurisdictional Delineation Study Area (JDSA). The JDSA is defined as the project limits. The JDSA was visually surveyed for both federal and State jurisdictional areas via a combination of vehicle and, when possible, on foot. Areas of potential jurisdiction were evaluated according to the most current regulatory criteria and guidance. The JD Report for the project is provided in Appendix D.

- **Focused Coastal California Gnatcatcher Surveys:** An LSA biologist conducted site visits to survey for the federally threatened coastal California gnatcatcher (*Polioptila californica californica*) potentially occurring within the BSA from May through June 2025. These surveys were conducted to ascertain whether the federally threatened species is present within the BSA. Surveys were conducted in accordance with protocol pursuant to permit requirements (i.e., Federal Fish and Wildlife Permit TE-777965 and an attachment to CDFW Scientific Collecting Permit SC-000777). A copy of the Coastal California Gnatcatcher Survey Results letter report is included in Appendix E.
- **Riparian Bird Surveys:** LSA Biologists Denise Woodard and Christina Van Oosten conducted focused surveys for federally listed and/or State-listed riparian birds including least Bell's vireo (*Vireo bellii pusillus*; LBVI) and southwestern willow flycatcher (*Empidonax traillii extimus*; SWWF) within the project site from May through July 2025 (Appendix F, Riparian Birds). Surveys were conducted pursuant to LSA's Federal Fish and Wildlife Permit TE-777965 and the CDFW attachment to Scientific Collecting Permit SC-000777 providing Conditions for Research on Listed Birds.
- **Oak Tree Inventory:** LSA biologists Leo Simone (International Society of Arboriculture [ISA] Certified Arborist No. WE-8491A) inventoried the oak trees and mapped their locations within the project limits. Field surveys were conducted in May 2025. Where accessible, trees were measured to determine diameter at breast height (DBH). If a tree was not fully accessible due to hazardous conditions (i.e., poison oak [*Toxicodendron diversilobum*], steep terrain, or Caltrans right-of-way [ROW] fence), the DBH was estimated. Tree heights and tree spreads were estimated; general characteristics (e.g., fire damage, broken branches, significant decay and bee hives) were noted. Trees with a DBH of less than 4 inches, unless accompanied by another main stem with a DBH of 4 inches or more, were not considered. Trees were given a rating of Good, Fair, or Poor based on the overall health of the tree. Trees rated as Good were considered in good health and had no significant issues. Trees rated as Fair were considered in moderate health and may have some issues such as decay, existing fire damage, and/or codominant trunks. Trees rated as Poor were considered in poor health and may have issues such as severe decay or significant beetle damage. The results of the oak tree inventory are provided in Appendix G, Oak Tree Inventory Report.

## 2.3 Personnel and Survey Dates

Table 1 (provided on the following page) lists the survey data, including the survey type, date(s), and biologist(s) who conducted the various surveys within the BSA. Representative site photographs taken during the course of fieldwork are included as Appendix H, Representative Site Photographs.

**Table 1: Survey Dates and Personnel**

Survey Type	Survey Date(s)	Survey Personnel
General Habitat Suitability Survey/Jurisdictional Delineation	May 28, 2025 June 13, 2025 July 7, 2025 August 20, 2025 August 27, 2025 September 2, 2025	Denise Woodard Carla Cervantes Christina Van Oosten
Focused Coastal California Gnatcatcher Surveys	May 26, 2025 June 2, 2025 June 9, 2025 June 16, 2025 June 23, 2025 June 30, 2025	Eric Krieg
Riparian Bird Surveys	May 30, 2025 June 10, 2025 June 20, 2025 June 30, 2025 July 11, 2025 July 21, 2025 July 31, 2025	Denise Woodard, Christina Van Oosten
Oak Tree Survey	May 22, 2025	Leo Simone

Source: Compiled by LSA (2025).

The biologists involved in the field surveys are well versed in all habitat types found within the BSA and are approved by the CDFW and USFWS to conduct general surveys for as well as monitor special-status species that occur within the vicinity of the BSA, including amphibians, birds, roosting bats, plants, reptiles, and mammals.

## 2.4 Agency Coordination and Professional Contacts

The following agency coordination has been conducted at the time of preparation of this NES(MI):

- National Oceanic and Atmospheric Administration National Marine Fisheries Service – Long Beach (NOAA Fisheries): Official species list received September 8, 2025.
- United States Fish and Wildlife Service – Carlsbad (USFWS): Unofficial USFWS species list received August 13, 2025.

The project is designed to avoid impacts to listed plant and animal species, and no adverse impacts to listed species are proposed by the project. If it is determined that the project may adversely affect a listed species, the appropriate resource agency (or agencies) would be contacted prior to construction activities. An effects determination was made for each of the listed species on the NOAA and USFWS species lists as part of agency coordination and is included in Section 5.1 of this document.

## **2.5 Limitations That May Influence Results**

The collection of biological field data is normally subject to environmental factors that cannot be controlled or reliably predicted. Consequently, the interpretation of field data must be conservative and must consider the uncertainties and limitations necessarily imposed by the environment. It should be noted that the areas surveyed within the BSA include and are directly adjacent to State Route 74 (SR-74) (and other paved areas) within the Caltrans ROW and are subject to regular anthropogenic disturbance and maintenance; therefore, conditions are subject to change throughout any given year.

In addition, the results of the biological resource surveys are limited where access was not available or safe. When possible, binoculars were used where access was unavailable. Although information was gathered from the entire BSA, project impacts discussed in this report are considered for biological resources that fall within the footprint of the build alternatives and in adjacent areas that may be directly or indirectly impacted by the build alternatives. Project plans are subject to change. Please note that any change in the plans for the build alternatives could affect the conclusions discussed in this NES(MI).

### **3. Results: Environmental Setting**

As described in Orange County Habitat Classification System (Gray and Bramlet 1992, Jones & Stokes Associates, Inc. 1993), the Biological Study Area (BSA) is located in the South Coast subregion of the Southwestern California region of the California Floristic Province. The South Coast subregion is characterized by valleys and small hills extending from the coast inland to the foothills of the Transverse and Peninsular Mountain Ranges. Much of the subregion is developed with urban, suburban, and agricultural uses. The natural vegetation of the subregion consists primarily of chaparral, some riparian scrub, ruderal, woodland, and sagebrush scrub. Much of the natural vegetation occurs in scattered or fragmented patches along State Route 74 (SR-74) and within the adjacent land and other areas not easily developed and/or in areas protected under regional or local land use plans. Specifically, the proposed project is southern Orange County, on SR-74 from the Interstate 5 (I-5) interchange to Post Mile (PM) 11.5.

#### **3.1 Description of the Existing Biological and Physical Conditions**

##### **3.1.1 Study Area**

A BSA was established to evaluate potential direct and indirect project-related effects on sensitive biological resources. The BSA encompasses the existing right-of-way within the project limits. Figure 2, Proposed Project Components, shows the location of the project right-of-way (ROW) on high-definition aerial photographs taken in May 2025. Surrounding landscape includes developed lands that contain residential and commercial development, transportation, and the Ronald W. Caspers Wilderness Park. The BSA is located in Orange County and within the United States Geological Survey (USGS) 7.5-minute series topographic quadrangles of *Alberhill*, *Cañada Gobernadora*, *Dana Point*, *El Toro*, *Laguna Beach*, *Lake Elsinore*, *Margarita Peak*, *San Clemente*, *San Juan Capistrano*, *Santiago Peak*, and *Sitton Peak*, California.

##### **3.1.2 Physical Conditions**

Much of the BSA consists of urban development and disturbed sites adjacent to the busy highway. Undeveloped areas within the BSA include a mix of ornamental and native vegetation and areas along Ronald W. Caspers Wilderness Park, which predominantly contain undeveloped areas consisting of native vegetation.

Vegetation communities or land cover types in the BSA include: coast live oak riparian, coast live oak woodland, sycamore riparian, chaparral, sagebrush scrub, ornamental, ruderal, and developed. The project impact area is primarily developed but does contain areas of undisturbed native habitat adjacent to Caltrans ROW, from approximately 1,500 feet east of the SR-74 and Antonio Parkway intersection until PM 11.5 (Figure 3), where the project would encroach upon native vegetation.

Prominent drainage features within the BSA include 23 earthen drainage features (i.e., Features 4, 8 through 12, 14 through 28, 30 and 31), 1 combination concrete and earthen feature (Feature 1), and 7 concrete features (Features 2, 3, 5, 6, 7, 13, and 29), totaling 31 jurisdictional features (Figure 4).

Elevations in the BSA range from approximately 106 to 628 feet above mean sea level (amsl). The topography within the BSA ranges from relatively flat to steep within an overall hilly terrain.

The climate is classified as Mediterranean (i.e., arid climate with hot, dry summers and moderately mild, wet winters). The average annual precipitation is approximately 14.6 inches. Although most of the precipitation occurs from November through May, thunderstorms may occur at all times of the year and can cause extremely high precipitation rates. Average annual temperatures typically range between 55 degrees Fahrenheit (°F) and 77°F.

The BSA is located within the Lower San Juan Creek (Hydrologic Unit Code [HUC] 180703010104) and Middle San Juan Creek (HUC 180703010102) watersheds. The total area of the watersheds is approximately 44.34 and 40.51 square miles, respectively. Soil types vary throughout the BSA, and previously undisturbed soils are generally absent from the BSA.

### **3.1.3 Biological Conditions**

The BSA is primarily developed; however, natural areas are located adjacent to the SR-74 transportation corridor primarily in the portion east of the SR-74/Avenida La Pata intersection. Developed areas present within the BSA consist of residential, commercial and transportation uses. Prominent vegetation types and land uses within the BSA are discussed in the subsection below and are shown on Figure 3, Vegetation and Land Cover (13 sheets).

### **3.1.4 Vegetation/Natural Communities**

Natural communities and land cover types existing within the BSA were mapped and classified based on existing conditions at the time of the surveys using the classifications described in the Methods Used to Survey the Vegetation of Orange County Parks and Open Space Areas and the Irvine Company Property, developed for the County of Orange Environmental Management Agency and Environmental Planning Division (Gray and Bramlet 1992, Jones & Stokes Associates, Inc. 1993) (see Table 2 below).



**Table 2: Vegetation Communities and Land Cover Types Mapped within the BSA**

Vegetation	Acreage Total
Coastal Sage Scrub	3.82
Chaparral	5.03
Ruderal	20.63
Nonnative Grassland	2.68
Southern Cottonwood-Willow Riparian Forest	0.81
Coast Live Oak Woodland	5.40
Developed Areas and Bare Ground	95.87
Ornamental Trees	1.77
Total	<b>136.00</b>

Detailed descriptions of each natural community and land cover type (from the Gray and Bramlet 1992, Jones & Stokes 1993) identified in the BSA are provided below.

- Coastal Sage Scrub:** Small patches of CSS are scattered throughout the BSA. Dominant species within this community include California sagebrush (*Artemisia californica*), coyote bush, California buckwheat, white sage (*Salvia apiana*), black sage (*Salvia mellifera*), California brickellbush (*Brickellia californica*), stork's bill (*Erodium* spp.), ripgut brome (*Bromus diandrus*), and foxtail chess (*Bromus madritensis*).
- Chaparral:** Chaparral occurs primarily in the central and eastern portion of the BSA, where it is often bordered by coast live oak woodland. Dominant species within this plant community in the BSA include laurel sumac (*Malosma laurina*), blue elderberry (*Sambucus nigra* ssp. *cerulea*), California sagebrush, and lemonade berry (*Rhus integrifolia*).
- Ruderal:** Ruderal consists of early successional grassland dominated by pioneering herbaceous plants that readily colonize disturbed ground, generally considered weeds. Ruderal is found in various sections including areas adjacent to the Caltrans ROW, 4-5 feet from the edge of pavements on both sides of SR-74 that are frequently maintained by mowing for fire prevention by the Caltrans maintenance unit. This habitat type readily grows within areas that receive disturbance. In this case, the BSA is affected by the operation of the existing SR-74. Plant species observed include red brome (*Bromus rubens*), slender wild oat (*Avena barbata*), and Bermuda grass (*Cynodon dactylon*).
- Nonnative Grassland:** Nonnative grassland occurs in disturbed areas throughout the BSA. Dominant plant species in this community within the BSA include tocalote (*Centaurea melitensis*), stork's bill, ripgut brome, foxtail chess, and soft chess (*Bromus hordeaceus*).

- **Southern Cottonwood-Willow Riparian Forest:** Southern cottonwood – willow riparian forest occurs in two drainages in the BSA, where it is dominated by arroyo willow (*Salix lasiolepis*), Goodding's willow (*Salix gooddingii*), California sycamore (*Platanus racemosa*), and blue elderberry. No southern cottonwoods are present within the BSA. However, this plant community was designated based on its inclusion in a larger plant community that extends to include areas adjacent to the BSA.
- **Coast Live Oak Woodland:** Coast live oak woodland occurs throughout most of the BSA, particularly in areas associated with drainage features. It is dominated by coast live oak (*Quercus agrifolia*), but blue elderberry and scrub oak (*Quercus berberidifolia*) are also common constituents.
- **Ornamental Trees:** There is one stand of eucalyptus (*Eucalyptus* sp.) in the BSA. Another type of ornamental tree, the Peruvian pepper tree (*Schinus molle*), occurs as individuals in the BSA, but not as stands large enough to map as distinct plant communities.
- **Developed Areas and Bare Ground:** Developed areas and bare ground occur throughout the project alignment as paved and unpaved roads, road shoulders, pullouts, and other areas of compacted soil with little or no vegetation. The existing road shoulder is unvegetated, and soils consisting of compacted gravel and compacted sandy loam.

### 3.1.5 Plant Species

Most of the 68 plant species observed within the BSA during the May through September 2025 field surveys are characteristic of those found throughout most of Southern California (a complete list of observed or otherwise detected plant species is provided in Appendix C). No special-status plant species were observed during the field surveys.

### 3.1.6 Animal Species

Most animal species observed within the BSA during the various field surveys are characteristic of those found throughout most of Southern California and include 62 bird species (a complete list of observed or otherwise detected animal species is provided in Appendix C). A few special-status species were observed during the field surveys, including yellow warbler (*Setophagia petechia*) and least Bell's vireo (*Vireo bellii pusillus*). All special-status species observed are discussed further in Chapters 4 and 5.

### 3.1.7 Aquatic Resources

The Jurisdictional Delineation (JD) identified 35 distinct aquatic resources/drainage features within the Jurisdictional Delineation Study Area (JDSA) (refer to Figure 4,

Jurisdictional Areas [23 sheets]). All but 5 of the 35 features (Features 31 through 35) identified by the JD are considered jurisdictional.

Of the 30 features considered jurisdictional, the BSA includes 22 earthen drainages (i.e., Features 4, 8 through 12, 14 through 28, and 30), 1 combination concrete and earthen feature (Feature 1), and 7 concrete drainages (i.e., Features 2, 3, 5, 6, 7, 13, and 29). All these features may be subject to jurisdiction by the California Department of Fish and Wildlife (CDFW) under Section 1600 of the California Fish and Game Code, the Regional Water Quality Control Board (RWQCB) under Section 401 of the Clean Water Act (CWA) or Porter-Cologne Water Quality Control Act (Porter-Cologne Act), and/or the United States Army Corps of Engineers (USACE) under Section 404 of the CWA. Section 4.1.5 provides further information regarding these delineated jurisdictional features.

### **3.1.8 Fish Passage**

The California Department of Transportation (Caltrans) is required by Senate Bill (SB) 857 to construct projects without presenting barriers to fish passage or to remediate existing barriers. There is no essential fish critical habitat for any fish species located within the BSA. A Southern California steelhead Distinct Population Segment (*Oncorhynchus mykiss irideus*; DPS) has historically populated San Juan Creek; however, the population is currently considered extirpated from San Juan Creek. Fish passage is not anticipated to be affected within the BSA because anadromous fish are not expected to be present within either the project footprint or the BSA.

### **3.1.9 Invasive Species**

Exotic species are typically most numerous in disturbed habitats adjacent to roads and developed areas, and frequently border areas of ornamental landscaping. Nonnative plant species occur within the plant communities throughout the BSA, largely in areas that have been disturbed by human uses and/or development. There are 29 nonnative plants occurring on the California Invasive Plant Council (Cal-IPC) California Invasive Plant Inventory identified in the BSA. Invasive species that have substantial ecological effects are given a moderate or high rating. In total, 11 invasive plant species with a moderate or high Cal-IPC rating were identified in the BSA (see Table 3 below).

**Table 3: Cal-IPC Rated Moderate and High Species Within the BSA**

Species Scientific Name	Species Common Name	Cal-IPC Rating <sup>1,2</sup>
<i>Avena barbata</i>	Slender wild oat	Moderate
<i>Avena fatua</i>	Wild oat	Moderate
<i>Brassica nigra</i>	Black mustard	Moderate
<i>Bromus diandrus</i>	Ripgut brome	Moderate
<i>Centaurea melitensis</i>	Tocalote	Moderate
<i>Cynara cardunculus</i>	Artichoke thistle	Moderate
<i>Cynodon dactylon</i>	Bermuda grass	Moderate
<i>Hirschfeldia incana</i>	Shortpod mustard	Moderate
<i>Nicotiana glauca</i>	Tree tobacco	Moderate
<i>Pennisetum setaceum</i>	Crimson fountain grass	Moderate
<i>Schinus terebinthifolius</i>	Brazilian pepper tree	Moderate

Source: Compiled by LSA (2025).

<sup>1</sup> High – These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.

<sup>2</sup> Moderate – These species have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, although establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.

BSA = Biological Study Area

Cal-IPC = California Invasive Plant Council

### 3.2 Habitat Connectivity

Wildlife movement of species such as mountain lions (*Puma concolor*), bobcats (*Lynx rufus*), and coyotes (*Canis latrans*) is expected within portions of the BSA, particularly within and along San Juan Creek, drainage channels, riparian vegetation, and undeveloped areas present within the eastern portion of the project site, east of the SR-74/Avenida La Pata intersection. Wildlife occupying urban areas, similar to those found in the BSA, are known to move using drainage channels.

In addition, the eastern portion of the BSA contains wildlife undercrossings to accommodate wildlife movement under SR-74 that may occur in the BSA. These are typically associated within unnamed and ephemeral drainage features that connect to San Juan Creek. These sites provide habitat and cover for movement of animals within the Orange County Southern Subregion Habitat Conservation Plan (HCP) non-reserve and reserve open space areas. Mountain lion prints were observed at two wildlife undercrossings during the field surveys, and it is anticipated that other wildlife species also use these and other wildlife undercrossings.

A small portion of the eastern extent of the BSA is within the Orange County Southern Subregion HCP, where portions of the BSA contain habitat known to be occupied by species covered under the HCP.

The BSA does not contain any essential connectivity areas, interstate connections, small natural areas or potential riparian connections as documented in the California Essential Habitat Connectivity Project report (Spencer et al. 2010). However, the eastern portions of the BSA contains a natural landscape block generally associated with Ronald W. Caspers Wilderness Park and adjacent undeveloped areas.

### **3.3 Regional Species and Habitats and Natural Communities of Concern**

For the purposes of this NES(MI), special-status species are considered to be those listed under the federal Endangered Species Act (FESA) and/or California Endangered Species Act (CESA), California Fully Protected Species, animal species designated as “California Species of Special Concern” and “California Special Animals” by the CDFW, and plant species with a California Rare Plant Rank (CRPR) of 1, 2, or 3. All of the plants constituting CRPRs 1A, 1B, 2A, and 2B are intended to meet the status definitions of “threatened” or “endangered” in CESA and the California Fish and Game Code, and are considered by the California Native Plant Society (CNPS) to be eligible for State listing. At the discretion of the California Environmental Quality Act (CEQA) Lead Agency, impacts to these species may be analyzed as such, pursuant to *State CEQA Guidelines* Sections 15125(c) and 15380. Plants in Rank 3 (limited information; review list), Rank 4 (limited distribution; watch list), or that are considered Locally Unusual and Significant may be analyzed under CEQA if there is sufficient information to assess potential significant impacts. It should also be noted that “California Species of Special Concern” and “California Special Animal” are administrative designations made by the CDFW and carry no formal legal protection status. However, Section 15380 of the *State CEQA Guidelines* indicates that these species should be included in an analysis of project impacts if they can be shown to meet the criteria of sensitivity outlined therein. Table 4 lists special-status species evaluated for potential occurrence in the BSA.

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**Table 4: Special-Status Plants and Animals Potentially Occurring or Known to Occur in, and/or in the Vicinity of, the BSA**

Species Scientific Name & Common Name	Species Status	General Habitat Description	Habitat Present/Absent	Rationale
<b>PLANTS</b>				
<i>Abronia villosa</i> var. <i>aurita</i> <b>Chaparral sand-verbena</b>	US: – CA: 1B.1 NCCP: –	Sandy areas (generally flats and benches along washes) in chaparral and coastal sage scrub, and improbably in desert dunes or other sandy areas, below 1,600 meters (5,300 feet) elevation. In California, reported from Riverside, San Diego, Imperial, Los Angeles, and Ventura Counties. Believed extirpated from Orange County. Also reported from Arizona and Mexico (Baja California). Plants reported from desert communities are likely misidentified.	HP	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA, this species is not known to occur within range (Orange County) of the area, and direct impacts to the species are not anticipated. Additionally, there are no records of this species occurring in the project vicinity (e.g., 3 miles from the project site).
<i>Aldama purissima</i> <b>La Purisima aldama</b>	US: – CA: 2B.3 NCCP: –	Occurs in coastal bluff scrub and chaparral habitats. Dry, rocky places in open shrubland.	HP	<b>Low.</b> While there is potentially suitable habitat in the BSA, suitable habitat is absent from the proposed construction areas. Direct impacts to this species are not expected. Additionally, there are no records of this species occurring in the project vicinity.
<i>Allium marvinii</i> <b>Yucaipa onion</b>	US: – CA: 1B.2 NCCP: –	Openings in clay soils in chaparral. Known only from the Yucaipa and Beaumont areas of the San Bernardino Mountains; 760 to 1,065 meters (2,500 to 3,500 feet) elevation.	HP	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA, this species is not known to occur within range of the area, and direct impacts to the species are not anticipated. Additionally, there are no records of this species occurring in the project vicinity.
<i>Allium munzii</i> <b>Munz's onion</b>	US: FE CA: ST/1B.1 NCCP: –	Seasonally moist sites on clay soils (generally) or within rocky outcrops (pyroxenite) on rocky-sandy loams (such as Cajalco, Las Posas, and Vallecitos) with clay subsoils, in openings within coastal sage scrub, pinyon juniper woodland, and grassland, at 300 to 1,070 meters (1,000 to 3,500 feet) elevation. Known only from western Riverside County in the greater Perris Basin (Temescal Canyon-Gavilan Hills/Plateau, Murrieta-Hot Springs areas) and within the Elsinore Peak (Santa Ana Mountains) and Domenigoni Hills regions.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or proposed construction areas. Additionally, there are no records of this species occurring in the project vicinity.
<i>Ambrosia pumila</i> <b>San Diego ambrosia</b>	US: FE CA: 1B.1 NCCP: –	Open, seasonally wet, generally low areas in floodplains or at edges of vernal pools or playas, usually in sandy loam or on clay (including upland clay slopes), at 20 to 487 meters (70 to 1,600 feet) elevation. Known from western Riverside and western San Diego Counties. Also occurs in Mexico.	HP	<b>Not Expected.</b> Suitable soils are present within the BSA. However, floodplains, edges of vernal pools, and/or playas are absent from the proposed construction areas. Direct impacts to this species are not expected. Additionally, there are no records of this species occurring in the project vicinity.
<i>Aphanisma blitoides</i> <b>Aphanisma</b>	US: – CA: 1B.2 NCCP: NC	Sandy or clay soils on slopes or bluffs near the ocean, usually in coastal bluff scrub, coastal dunes, or coastal scrub, below 305 meters (1,000 feet) elevation. Known in California from Ventura, Santa Barbara, Los Angeles, Orange, and San Diego Counties. Also occurs in Mexico.	HP	<b>Not Expected.</b> While potentially suitable coastal sage scrub is present, the BSA is relatively removed from the coast. Therefore, direct impacts to this species are not expected. Additionally, there are no records of this species occurring in the project vicinity.
<i>Arctostaphylos rainbowensis</i> <b>Rainbow manzanita</b>	US: – CA: 1B.1 NCCP: –	Generally in gabbro chaparral in northwestern San Diego and southwestern Riverside Counties at 205 to 790 meters (670 to 2,600 feet) elevation. Known only from Riverside and San Diego Counties, California.	HP	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA, this species is not known to occur within range of the area, and direct impacts to the species are not anticipated. Additionally, there are no records of this species occurring in the project vicinity.
<i>Artemisia palmeri</i> <b>San Diego sagewort</b>	US: – CA: 4.2 NCCP: –	Sandy drainages and riparian areas in chaparral, coastal scrub, and riparian communities at 50 to 3,000 feet (15 to 915 meters) elevation. In California, known only from San Diego County. Also occurs in Baja California, Mexico.	HP	<b>Low.</b> Potentially suitable habitat is present within the eastern portion of the BSA and within the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Asplenium vespertinum</i> <b>Western spleenwort</b>	US: – CA: 4.2 NCCP: –	Rocky sites in chaparral, cismontane woodland, and coastal scrub at 180 to 1,000 meters (600 to 3,300 feet) elevation. In California, known only from Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura Counties. Also occurs in Mexico.	HP	<b>Low.</b> Potentially suitable habitat is present within the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.

**Table 4: Special-Status Plants and Animals Potentially Occurring or Known to Occur in, and/or in the Vicinity of, the BSA**

Species Scientific Name & Common Name	Species Status	General Habitat Description	Habitat Present/Absent	Rationale
<i>Astragalus brauntonii</i> <b>Braunton's milk-vetch</b>	US: FE CA: 1B.1 NCCP: –	Generally shallow calcium carbonate soils derived from marine substrates; although it is occasionally found downstream of known occurrences on non-carbonate soils where survivorship of plants may be reduced. Usually on sandstone with carbonate layers in openings in chaparral or coastal sage scrub following fire but may follow other disturbance and occur on stiff gravelly clay soils over granite. Typically associated with the fire-dependent chaparral habitat on limestone and on down-wash sites below 640 meters (2,100 feet) elevation. Known only from Los Angeles, Orange, Riverside, and Ventura Counties.	HP	<b>Low.</b> Potentially suitable habitat is present within the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Atriplex coulteri</i> <b>Coulter's saltbush</b>	US: – CA: 1B.2 NCCP: –	Alkaline or clay soils in ocean bluffs and ridge tops and alkaline low places in coastal bluff scrub, coastal dunes, coastal sage scrub, and valley and foothill grasslands below 460 meters (1,500 feet) elevation. In California, known only from Los Angeles, Orange, Santa Barbara, San Bernardino, San Luis Obispo, Ventura, and San Diego Counties. Also occurs in Mexico. Reports of this species from Riverside County are based on misidentification of <i>Atriplex serenana</i> ssp. <i> davidsonii</i> ( <i>The Vascular Plants of Western Riverside County, California</i> . F.M. Roberts et al., 2004).	HP	<b>Not Expected.</b> While potentially suitable coastal sage scrub is present, the BSA is relatively removed from the coast. Therefore, direct impacts to this species are not expected. Additionally, there are no records of this species occurring in the project vicinity.
<i>Atriplex pacifica</i> <b>South coast saltscale</b>	US: – CA: 1B.2 NCCP: –	Alkali soils in coastal sage scrub, playas, coastal bluff scrub, coastal dunes, and chenopod scrub below 200 meters (600 feet) elevation, and perhaps formerly up to about 430 meters (1,400 feet) in Los Angeles County. In California, known from the Channel Islands and mainland Los Angeles, San Diego and Orange Counties. Also occurs in Mexico. Believed extirpated from Ventura County. Reports of this species from Riverside County are based on misidentification of <i>Atriplex serenana</i> ssp. <i> davidsonii</i> ( <i>The Vascular Plants of Western Riverside County, California</i> . F.M. Roberts et al., 2004).	HA	<b>Not Expected.</b> Suitable alkali soils are not present within the BSA or proposed construction areas. The BSA is outside the elevation range for this species. Additionally, there are no records of this species occurring in the project vicinity.
<i>Baccharis vanessae</i> <b>Encinitas baccharis</b>	US: FT CA: SE/1B.1 NCCP: –	In chaparral, generally on sandstone soils in steep, open, rocky areas (north-facing outcrops, cliffs) at 60 to 720 meters (200 to 2,400 feet) elevation. Known only from San Diego County, California.	HP	<b>Not Expected.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, this species is known only from San Diego County. Additionally, there are no records of this species occurring in the project vicinity.
<i>Bahiopsis laciniata</i> <b>San Diego County viguiera</b>	US: – CA: 4.3 NCCP: –	Chaparral and coastal scrub at 60 to 750 meters (160 to 2,500) feet elevation. In California, known only from Orange and San Diego Counties. Also occurs in Mexico.	HP	<b>Low.</b> Potentially suitable habitat is present within the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Berberis nevini</i> <b>Nevin's barberry</b>	US: FE CA: SE/1B.1 NCCP: –	Gravelly wash margins in alluvial scrub or coarse soils and rocky slopes in chaparral at 70 to 825 meters (220 to 2,700 feet) elevation. Known occurrences at higher elevations are planted (not natural). Known only from Los Angeles, San Bernardino, Riverside, and San Diego Counties, California.	HP	<b>Low.</b> Potentially suitable habitat is present within the BSA suitable habitat is absent from the proposed construction areas. Direct impacts to this species are not expected. Additionally, there are no records of this species occurring in the project vicinity.
<i>Brodiaea filifolia</i> <b>Thread-leaved brodiaea</b>	US: FT CA: SE/1B.1 NCCP: –	Usually on clay or associated with vernal pools or alkaline flats; occasionally in vernal moist sites in fine soils (clay loam, silt loam, fine sandy loam, loam, loamy fine sand). Typically associated with needlegrass or alkali grassland or vernal pools. Occurs from 25 to 1,120 meters (80 to 3,700 feet) elevation. Known only from Los Angeles, Orange, Riverside, San Bernardino, San Diego, and San Luis Obispo Counties, California.	HA	<b>Not Expected.</b> Potentially suitable soils occur within the BSA, however it lacks vernal moist sites, grasslands, and vernal pools. Multiple CNDDB occurrences are documented in the project vicinity.
<i>Brodiaea orcuttii</i> <b>Orcutt's brodiaea</b>	US: – CA: 1B.1 NCCP: –	Clay and some serpentine soils, usually associated with streams or vernal pools, from 30 to 1,700 meters (100 to 5,600 feet) elevation. In California, known only from Riverside and San Diego Counties. Also occurs in Mexico.	HP	<b>Low.</b> While there is potentially suitable habitat in the BSA, suitable habitat is absent from the proposed construction areas. Direct impacts to this species are not expected. Additionally, there are no records of this species occurring in the project vicinity.
<i>Brodiaea santarosae</i> <b>Santa Rosa Basalt brodiaea</b>	US: – CA: 1B.2 NCCP: –	Santa Rosa basalt in grassland at 580 to 1,045 meters (1,900 to 3,430 feet) elevation. Known only from Riverside and San Diego Counties, California.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas. Direct impacts to this species are not expected. Additionally, there are no records of this species occurring in the project vicinity.



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<i>Calochortus plummerae</i> <b>Plummer's mariposa-lily</b>	US: – CA: 4.2 NCCP: –	Rocky sites of granitic or alluvial material in valley and foothill grassland, coastal scrub, chaparral, cismontane woodland, and lower montane coniferous forest, at 100 to 1,700 meters (300 to 5,600 feet) elevation. Known from Riverside, San Bernardino, Orange, Los Angeles, and Ventura Counties, California. In the western Riverside County area, this species is known from the foothills of the San Bernardino Mountains, northeastern Santa Ana Mountains, Box Springs Mountains, and from the Lake Skinner area ( <i>The Vascular Plants of Western Riverside County</i> , California. F.M. Roberts et al., 2004). Appears to intergrade with <i>Calochortus weedii</i> var. <i>intermedius</i> , which is mostly from Santa Ana Mountains eastward.	HP	<b>Low.</b> Suitable habitat is not present within the BSA or the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Calochortus weedii</i> var. <i>intermedius</i> <b>Intermediate mariposa-lily</b>	US: – CA: 1B.2 NCCP: C	Dry, open rocky slopes and rock outcrops in chaparral, coastal sage scrub, and grassland, at 105 to 855 meters (340 to 2,800 feet) elevation. Known only from Los Angeles, Orange, Riverside, and San Bernardino Counties, California. In the western Riverside County area, this species is known from the hills and valleys west of Lake Skinner and Vail Lake ( <i>The Vascular Plants of Western Riverside County, California</i> . F.M. Roberts et al., 2004). Appears to intergrade with <i>Calochortus plummerae</i> , which is mostly east and north of Santa Ana Mountains.	HP	<b>Moderate.</b> Suitable habitat is present within the BSA and the proposed construction areas. Multiple CNDDB occurrences are documented in the project vicinity.
<i>Caulanthus simulans</i> <b>Payson's jewel-flower</b>	US: – CA: 4.2 NCCP: –	Recently burned areas or disturbed sites such as streambeds in chaparral, coastal sage scrub, riparian areas, and grassland at 60 to 2,200 meters (200 to 7,200 feet) elevation. Known from San Diego and Orange County (Collections in western Riverside County misidentified, are <i>C. heterophyllus</i> var. <i>pseudosimulans</i> ).	HP	<b>Moderate.</b> Suitable habitat is present within the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Ceanothus pendletonensis</i> <b>Pendleton ceanothus</b>	US: – CA: 1B.2 NCCP: –	Chaparral, cismontane woodland. Granitic, 110-870 m (360-2,860 feet) elevation. In California, known from San Diego County.	HP	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA and the proposed construction areas, this species is known only from San Diego County. Direct impacts to this species are not expected. Additionally, there are no records of this species occurring in the project vicinity.
<i>Centromadia parryi</i> ssp. <i>australis</i> <b>Southern tarplant</b>	US: – CA: 1B.1 NCCP: –	In vernal wet areas such as edges of marshes and vernal pools, at edges of roads and trails, and in other areas of compacted, poorly drained, or alkaline soils where competition from other plants is limited, often due to disturbance, below 425 meters (1,400 feet) elevation. In California, known only from Santa Barbara, Ventura, Los Angeles, Orange and San Diego Counties. Also occurs in Mexico.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas. Direct impacts to this species are not expected. However, there is an occurrence from 1995 documenting this species approximately 2 miles from the site.
<i>Centromadia pungens</i> ssp. <i>laevis</i> <b>Smooth tarplant</b>	US: – CA: 1B.1 NCCP: –	Generally alkaline areas in chenopod scrub, meadows, playas, riparian woodland, valley and foothill grassland below 480 meters (1,600 feet) elevation. Known from Riverside and San Bernardino Counties, extirpated from San Diego County.	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i> <b>Orcutt's pincushion</b>	US: – CA: 1B.1 NCCP: –	Sandy areas of coastal bluff scrub and coastal sand dunes below 100 meters (300 feet) elevation. In California, known only from Los Angeles, Orange (believed extirpated), San Diego, and Ventura Counties. Also occurs in Mexico.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or proposed construction areas. Additionally, the BSA is not within the preferred elevation range of this species and there are no records of this species occurring in the project vicinity.
<i>Chamaebatia australis</i> <b>Southern mountain misery</b>	US: – CA: 4.2 NCCP: –	Gabbroic or metavolcanic soils in chaparral at 300 to 1,020 meters (980 to 3,400 feet) elevation. Known in California from Los Angeles and San Diego Counties. Also occurs in Mexico.	HP	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA and the proposed construction areas, this species is known only from San Diego and Los Angeles County. Direct impacts to this species are not expected. Additionally, there are no records of this species occurring in the project vicinity.
<i>Chorizanthe leptotheca</i> <b>Peninsular spineflower</b>	US: – CA: 4.2 NCCP: –	Chaparral, coastal scrub, lower montane coniferous forest. On granitic soils, in alluvial fans. 300-1900 m (980-6,240 feet). In California, known from Riverside, San Bernardino and San Diego Counties. Also known from Baja California.	HP	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA and the proposed construction areas, this species is known only from San Diego, Riverside, and San Bernardino County. Direct impacts to this species are not expected. Additionally, there are no records of this species occurring in the project vicinity.

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<i>Chorizanthe parryi</i> var. <i>parryi</i> <b>Parry's spineflower</b>	US: – CA: 1B.1 NCCP: –	Sandy or rocky soils in chaparral, coastal scrub, oak woodlands, and grassland at 40 to 1,705 meters (100 to 5,600 feet) elevation. Known only from Los Angeles, Riverside, and San Bernardino Counties.	HP	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA and the proposed construction areas, this species is known only from Los Angeles, Riverside, and San Bernardino County. Direct impacts to this species are not expected. Additionally, there are no records of this species occurring in the project vicinity.
<i>Chorizanthe polygonoides</i> var. <i>longispina</i> <b>Long-spined spineflower</b>	US: – CA: 1B.2 NCCP: –	Generally clay soils in chaparral, coastal sage scrub, and grassland at 30 to 1,530 meters (100 to 5,000 feet) elevation. In California, known only from Orange, Riverside, Santa Barbara, and San Diego Counties. Also occurs in Mexico.	HP	<b>Low.</b> Suitable habitat is not present within the BSA or the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Cistanthe maritima</i> <b>Seaside cistanthe</b>	US: – CA: 4.2 NCCP: –	Coastal bluff scrub, coastal scrub, and Valley and foothill grassland, growing at elevations from 5 to 300 meters (15 to 1,000 feet). In California, known only from Los Angeles, Marin, Orange, Ventura, Santa Barbara, and San Diego Counties.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas. Direct impacts to this species are not expected. Additionally, there are no records of this species occurring in the project vicinity.
<i>Clinopodium (Satureja) chandleri</i> <b>San Miguel savory</b>	US: – CA: 1B.2 NCCP: –	Rocky moist sites in oak woodland or tall dense chaparral or at the margins these communities in coastal sage scrub or grassland, at 110 to 1,210 meters (400 to 4,000 feet) elevation. Prefers moist rocky canyons with trees or large shrubs. Known only from Orange, Riverside, and San Diego Counties, and Baja California, Mexico. In western Riverside County restricted to Santa Ana Mountains.	HP	<b>Moderate.</b> Suitable habitat is present within the BSA and the proposed construction areas. Multiple CNDDB occurrences are documented in the project vicinity.
<i>Collomia diversifolia</i> <b>Serpentine collomia</b>	US: – CA: 4.3 NCCP: –	Chaparral and cismontane woodland, growing at elevations from 200 to 600 meters (600 to 2,000 feet).	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i> <b>Summer holly</b>	US: – CA: 1B.2 NCCP: –	Chaparral or cismontane woodland at 30 to 790 meters (100 to 2,600 feet). In California, known only from Orange, Riverside, and Santa Barbara, and San Diego Counties. Also occurs in Mexico.	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Convolvulus simulans</i> <b>Small-flowered morning-glory</b>	US: - CA: 4.2 NCCP: –	Clay and serpentinite seeps in grassland, coastal scrub, and openings in chaparral at 30 to 700 meters (100 to 2,300 feet) elevation. Occurs in many counties in non-desert areas of California. Also occurs in Mexico.	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Deinandra paniculata</i> <b>Paniculate tarplant</b>	US: – CA: 4.2 NCCP: –	Vernally mesic soils in coastal scrub and grassland at 25 to 940 meters (80 to 3,100 feet) elevation. In California, known only from Orange, Riverside, Santa Barbara, San Bernardino, San Diego, San Luis Obispo Counties. Also occurs in Mexico.	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Dichondra occidentalis</i> <b>Western dichondra</b>	US: – CA: 4.2 NCCP: C	Mostly dry sandy banks in scrub or under trees; coastal sage scrub, chaparral, oak woodland; elevations 50 to 520 meters (200 to 1,700 feet). In California, known from Orange, Santa Barbara, San Diego and Ventura Counties including Santa Catalina Island, Santa Cruz Island, San Miguel Island and Santa Rosa Island. Unknown in Los Angeles and Marin Counties.	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Diplacus (Mimulus) clevelandii</i> <b>Cleveland's bush monkeyflower</b>	US: - CA: 4.2 NCCP: –	Chaparral, cismontane woodland, lower montane coniferous forest. Disturbed gravelly roadsides and slopes. Gabbro soils. 450-2000 m (1,475-6,570 feet). In California, known from Orange, Riverside and San Diego Counties. Also occurs in Baja California.	HP	<b>Low.</b> While there is potentially suitable habitat in the BSA, this species is not known to occur within range of the area, and direct impacts to the species are not anticipated. Additionally, there are no records of this species occurring in the project vicinity.
<i>Dodecahema leptoceras</i> <b>Slender-horned spineflower</b>	US: FE CA: SE/1B.1 NCCP: –	In the Vail Lake area, occurs in gravel soils of Temecula arkose deposits in openings in chamise chaparral. In other areas, occurs in sandy cobbly riverbed alluvium in alluvial fan sage scrub (usually late seral stage), on floodplain terraces and benches that receive infrequent overbank deposits from generally large washes or rivers, where it is most often found in shallow silty depressions dominated by leather spineflower ( <i>Lastarriaea coriacea</i> ) and other native annual species, and is often associated with cryptogamic soil crusts composed of bryophytes, algae and/or lichens. Occurs at 200 to 760 meters (600 to 2,500 feet) elevation. Known only from Los Angeles, Riverside, and San Bernardino Counties, California.	HP	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA and the proposed construction areas, this species is known only from Los Angeles, Riverside, and San Bernardino County. Direct impacts to this species are not expected. Additionally, there are no records of this species occurring in the project vicinity.

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<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i> <b>Blochman's dudleya</b>	US: – CA: 1B.1 NCCP: C	Dry rocky places, often on clay or serpentine, in chaparral, coastal sage scrub, or grassland, below 450 meters (1,500 feet) elevation. In California, known only from Los Angeles, Orange, Santa Barbara, San Diego, San Luis Obispo, and Ventura Counties. Also occurs in Mexico.	HP	<b>Not Expected.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. While there is one occurrence from 1987 approximately 2 miles from the site in Dana Point, its presence is noted as extirpated from the area.
<i>Dudleya chasmophyta</i> <b>Santiago Canyon dudleya</b>	US: – CA: 1B.1 NCCP: –	Chaparral and coastal scrub growing at elevations from 475 to 515 meters (1,500 to 1,700 feet). Known only from Los Orange County.	HP	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA, this species is not known to occur within range of the area, and direct impacts to the species are not anticipated. Additionally, there are no records of this species occurring in the project vicinity.
<i>Dudleya multicaulis</i> <b>Many-stemmed dudleya</b>	US: – CA: 1B.2 NCCP: –	Heavy, often clay soils or around granitic outcrops in chaparral, coastal sage scrub, and grassland below 790 meters (2,600 feet) elevation. Known only from Los Angeles, Orange, Riverside, San Bernardino, and San Diego Counties.	HP	<b>Moderate.</b> Suitable habitat is present within the BSA and the proposed construction areas. Multiple CNDDB occurrences are documented in the project vicinity.
<i>Dudleya stolonifera</i> <b>Laguna Beach dudleya</b>	US: FT CA: ST/1B.1 NCCP: C	Rocky areas (generally north-facing sandstone cliffs) at 10 to 260 meters (30 to 850 feet) elevation in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland. Known only from Orange County, California near Laguna Beach, with most occurrences in Laguna Canyon west of SR-73.	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Dudleya viscida</i> <b>Sticky dudleya</b>	US: – CA: 1B.2 NCCP: –	Rocky areas in coastal bluff scrub, chaparral, coastal sage scrub, and cismontane woodland from 10 to 550 meters (30 to 1,800 feet) elevation. Known only from Orange and San Diego Counties, California.	HP	<b>Moderate.</b> There is suitable habitat in the BSA and the proposed construction areas. Multiple CNDDB occurrences are documented in the project vicinity. One of these occurrences, from 1963, documents this species occurring within the BSA.
<i>Eryngium pendletonensis</i> <b>Pendleton button-celery</b>	US: – CA: 1B.1 NCCP: –	Vernally mesic sites in coastal bluff scrub, valley and foothill grassland, and vernal pools at 15 to 110 meters (50 to 360 feet) elevation. Known only from San Diego County.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas. Additionally, there are no records of this species occurring in the project vicinity.
<i>Erythranthe (Mimulus) diffusus</i> <b>Palomar monkeyflower</b>	US: - CA: 4.3 NCCP: –	Chaparral, lower montane coniferous forest. Sandy or gravelly soils. 1,220-1,830 m (4,000-6,005 feet). In California, known from Orange, Riverside and San Diego Counties. Also known from Baja California.	HP	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA, the BSA is not within the preferred elevation range of this species. Additionally, there are no records of this species occurring in the project vicinity.
<i>Euphorbia misera</i> <b>Cliff spurge</b>	US: – CA: 2B.2 NCCP: C	Rocky sites within coastal bluff scrub, coastal sage scrub, and Mojavean desert scrub at 10 to 500 meters (30 to 1,600 feet) elevation. In California, known only from the Channel Islands, coastal Orange and San Diego Counties, and Riverside County deserts. Also occurs in Mexico.	HP	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA, the BSA is relatively removed from the coast. Therefore, direct impacts to this species are not expected. Additionally, there are no records of this species occurring in the project vicinity. There is one documented occurrence from 1991 approximately 1.5 miles from the site.
<i>Harpagonella palmeri</i> <b>Palmer's grapplinghook</b>	US: – CA: 4.2 NCCP: C	Clay soils in openings in coastal sage scrub, juniper woodland, and grassland below 830 meters (2,700 feet) elevation. In California, known only from Orange, Riverside, and San Diego Counties and the Channel Islands. Also occurs in Arizona and Mexico.	HP	<b>Low.</b> While there is potentially suitable habitat in the BSA, suitable habitat is absent from the proposed construction areas. Direct impacts to this species are not expected.
<i>Hesperocyparis (Callitropsis, Cupressus) forbesii</i> <b>Tecate cypress</b>	US: – CA: 1B.1 NCCP: C	Evergreen tree found in closed-cone coniferous forest and chaparral at elevations from 255 to 1,500 meters (800 to 5,000 feet). In California, known from Orange and San Diego Counties. Trees known from Riverside County are planted. Also occurs in Mexico.	HP	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA, this species is not known to occur within the elevation range of the BSA, and impacts to the species are not anticipated. Additionally, there are no records of this species occurring in the project vicinity.
<i>Holocarpha virgata</i> ssp. <i>elongata</i> <b>Graceful tarplant</b>	US: – CA: 4.2 NCCP: –	Chaparral, cismontane woodland, coastal scrub, and grassland at 60 to 1,100 meters (200 to 3,600 feet) elevation. Known only from Orange, Riverside, and San Diego Counties, California.	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.

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<i>Hordeum intercedens</i> <b>Vernal barley</b>	US: – CA: 3.2 NCCP: –	Vernal pools and saline flats and depressions below 1,000 meters (3,300 feet) elevation. Known from many California Counties. Also occurs in Mexico.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas. Additionally, there are no records of this species occurring in the project vicinity.
<i>Horkelia cuneata</i> ssp. <i>puberula</i> <b>Mesa horkelia</b>	US: – CA: 1B.1 NCCP: –	Sandy or gravelly soils in chaparral, or rarely in cismontane woodland or coastal scrub at 70 to 825 meters (200 to 2,700 feet) elevation. Known only from San Luis Obispo, Santa Barbara, Ventura, Los Angeles, Orange, and San Bernardino Counties, California. Believed extirpated from Riverside and San Diego Counties.	HP	<b>Moderate</b> There is suitable habitat in the BSA and the proposed construction areas. There is one occurrence from 1944 documenting within the BSA.
<i>Horkelia truncata</i> <b>Ramona horkelia</b>	US: – CA: 1B.3 NCCP: –	Clay soils in chaparral and woodland; 300 to 1,500 meters (1,000 to 4,900 feet) elevation. Known from Peninsular Ranges in San Diego County and from Baja California.	HP	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA and the proposed construction areas, this species is known only from San Diego County. Direct impacts to this species are not expected. Additionally, there are no records of this species occurring in the project vicinity.
<i>Imperata brevifolia</i> <b>California satintail</b>	US: – CA: 2B.1 NCCP: –	Springs, meadows, streambanks, moist canyons, canals, alkaline sinks, and similar wet areas below 1220 meters (4,000 feet) elevation. Known from Butte, Fresno, Imperial, Inyo, Kern, Lake, Los Angeles, Orange, Riverside, San Bernardino, Tehama, Tulare, and Ventura Counties, though many collections are old and the populations likely extirpated. Also occurs in other areas of the western U.S. and Mexico.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas. There is one documented occurrence from 1995 approximately 0.5 mile from the site.
<i>Isocoma menziesii</i> var. <i>decumbens</i> <b>Decumbent goldenbush</b>	US: – CA: 1B.2 NCCP: –	Sandy soils, often in disturbed areas, in coastal scrub and chaparral from 10 to 135 meters (30 to 440 feet) elevation. Known from mainland Orange and San Diego Counties and from San Clemente and Santa Catalina Islands in California. Also occurs in Baja California.	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Juglans californica</i> <b>Southern California black walnut</b>	US: – CA: 4.2 NCCP: –	Primarily alluvial areas in chaparral, coastal sage scrub, and cismontane woodland at 50 to 900 meters (160 to 3,000 feet) elevation. In California, known only from Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura Counties, California.	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Juncus acutus</i> ssp. <i>leopoldii</i> <b>Southwestern spiny rush</b>	US: – CA: 4.2 NCCP: –	Mesic coastal dunes, alkali seeps, and coastal salt marshes at 3 to 900 meters (10 to 3,000 feet) elevation. In California, known from Los Angeles, Orange, Santa Barbara, San Diego, San Luis Obispo, and Ventura Counties. Also occurs in Arizona, Nevada, Mexico, and South America.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas. Additionally, there are no records of this species occurring in the project vicinity.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i> <b>Coulter's goldfields</b>	US: – CA: 1B.1 NCCP: –	Vernal pools and alkaline soils in marshes, playas, and similar habitats below 1,220 meters (4,000 feet) elevation. Known from Colusa, Merced, Tulare, Orange, Riverside, Santa Barbara, San Diego, San Luis Obispo, Tehama, Ventura, and Yolo Counties. Believed extirpated from Kern, Los Angeles, and San Bernardino Counties, and possibly also from Tulare County. Also occurs in Mexico.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas. Additionally, there are no records of this species occurring in the project vicinity.
<i>Lathyrus splendens</i> <b>Pride-of-California</b>	US: – CA: 4.3 NCCP: –	Chaparral growing at elevations from 200 to 1525 meters (650 to 5,000). Known from Los Angeles, Riverside, and San Diego County.	HP	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA and the proposed construction areas, this species is known only from San Diego County. Direct impacts to this species are not expected. Additionally, there are no records of this species occurring in the project vicinity.
<i>Lepechinia cardiophylla</i> <b>Heart-leaved pitcher sage</b>	US: – CA: 1B.2 NCCP: C	Closed cone coniferous forest, chaparral, cismontane woodland at 550 to 1,370 meters (1,800 to 4,500 feet) elevation. Occurs in the Santa Ana Mountains in Riverside and Orange Counties. Also reported from San Diego County and Baja California.	HP	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA, this species is not known to occur within range of the area, and direct impacts to the species are not anticipated. Additionally, there are no records of this species occurring in the project vicinity.
<i>Lepidium virginicum</i> var. <i>robinsonii</i> <b>Robinson's pepper-grass</b>	US: – CA: 4.3 NCCP: –	Dry soils in coastal sage scrub and chaparral below 885 meters (2,900 feet) elevation. In California, known only from Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino and San Diego Counties, and Santa Cruz Island. Also occurs in Mexico.	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.

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<i>Lessingia hololeuca</i> <b>woolly-headed lessingia</b>	US: – CA: 3 NCCP: –	Coastal scrub, lower montane coniferous forest, valley and foothill grassland, broadleaved upland forest. Clay, serpentine; roadsides, fields. 15-305 meters (50 to 1,000 feet) elevation. Known from Alameda, Fresno, Lake, Marin, Monterey, Napa, San Benito, Santa Clara, Santa Cruz, San Mateo, Solano, Sonoma, Tehama, Tulare, Tuolumne and Yolo Counties.	HP	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA and the proposed construction areas, this species is known only from Alameda, Fresno, Lake, Marin, Monterey, Napa, San Benito, Santa Clara, Santa Cruz, San Mateo, Solano, Sonoma, Tehama, Tulare, Tuolumne and Yolo Counties. Direct impacts to this species are not expected. Additionally, there are no records of this species occurring in the project vicinity
<i>Lilium humboldtii</i> ssp. <i>ocellatum</i> <b>Ocellated Humboldt lily</b>	US: – CA: 4.2 NCCP: –	Openings in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland at 30 to 1,800 meters (100 to 5,900 feet) elevation. Known only from Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, Santa Cruz Island, San Diego, Santa Rosa Island, and Ventura Counties, California.	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Lilium parryi</i> <b>Lemon lily</b>	US: – CA: 1B.2 NCCP: –	Bulbiferous perennial herb of wet areas in meadows, riparian, and montane coniferous forests at 1,220 to 2,790 meters (4,000 to 9,200 feet) elevation. In California, known from Los Angeles, Riverside, San Bernardino, and San Diego Counties. Also occurs in Arizona and Mexico.	HP	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA and the proposed construction areas, this species is known only from Los Angeles, Riverside, San Bernardino, and San Diego Counties. Direct impacts to this species are not expected. Additionally, the BSA is outside the elevation range for this species and there are no records of this species occurring in the project vicinity.
<i>Lycium brevipes</i> var. <i>hassei</i> <b>Santa Catalina Island desert-thorn</b>	US: – CA: 3.1 NCCP: –	Deciduous shrub of coastal bluffs and slopes in coastal bluff scrub and coastal scrub at 10 to 300 meters (30 to 1,000 feet) elevation. Known only from the Channel Islands (extirpated), one location on the Palos Verdes Peninsula in Los Angeles County, and one location in Orange County.	HP	<b>Not Expected.</b> While potentially suitable coastal sage scrub is present, the BSA is relatively removed from the coast. Therefore, direct impacts to this species are not expected. Additionally, there are no records of this species occurring in the project vicinity.
<i>Lycium californicum</i> <b>California box-thorn</b>	US: – CA: 4 .2 NCCP: –	Coastal bluff scrub and coastal scrub growing at 5 to 150 meters (15 to 495 feet). Known from Inyo, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego and Ventura Counties.	HP	<b>Not Expected.</b> While potentially suitable coastal sage scrub is present, the BSA is relatively removed from the coast. Therefore, direct impacts to this species are not expected. Additionally, there are no records of this species occurring in the project vicinity.
<i>Malacothrix saxatilis</i> var. <i>saxatilis</i> <b>Cliff malacothrix</b>	US: – CA: 4 .2 NCCP: –	Coastal bluff scrub and coastal scrub growing at elevations from 3 to 200 meters (10 to 650 feet). Known only from Orange and Santa Barbara Counties.	HP	<b>Not Expected.</b> While potentially suitable coastal sage scrub is present, the BSA is relatively removed from the coast and the BSA is outside the elevation range for this species. Therefore, direct impacts to this species are not expected. Additionally, there are no records of this species occurring in the project vicinity.
<i>Microseris douglasii</i> ssp. <i>platycarpa</i> <b>Small-flowered microseris</b>	US: – CA: 4.2 NCCP: –	Clay (especially alkali) in river bottoms at 15 to 1,070 meters (50 to 3,500 feet) in woodland, coastal scrub, grassland, and vernal pools.	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Monardella hypoleuca</i> ssp. <i>intermedia</i> <b>Intermediate monardella</b>	US: – CA: 1B.3 NCCP: –	Understory of chaparral, oak woodland, and occasionally coniferous forest at 200 to 1,250 meters (660 to 4,100 feet) elevation. Known only from the Santa Ana Mountains area of Orange, Riverside, and San Diego Counties, California.	HP	<b>Moderate.</b> There is suitable habitat in the BSA and the proposed construction areas. Multiple CNDDB occurrences are documented in the project vicinity.
<i>Monardella macrantha</i> ssp. <i>hallii</i> <b>Hall's monardella</b>	US: – CA: 1B.3 NCCP: –	Dry slopes and ridges in openings in chaparral, woodland, and forest at 695 to 2,195 meters (2,280 to 7,200 feet) elevation. Known only from Los Angeles, San Diego, Orange, Riverside, and San Bernardino Counties, California. In the western Riverside County area, known only from higher elevations in the Santa Ana and Agua Tibia Mountains ( <i>The Vascular Plants of Western Riverside County, California</i> . F.M. Roberts et al., 2004).	HP	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA, this species is not known to occur within range of the area, and direct impacts to the species are not anticipated. Additionally, there are no records of this species occurring in the project vicinity.

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<i>Myosurus minimus</i> ssp. <i>apus</i> <b>Little mousetail</b>	US: – CA: 3.1 NCCP: –	Alkaline areas in vernal pools at 20 to 640 meters (70 to 2,100 feet) elevation. In California, known only from the Central Valley of the coastal and inland areas of Southern California. Also occurs in Oregon and Mexico. Known from Colusa, Contra Costa, Lake, Merced, Riverside, San Bernardino, San Diego, Solano, Tulare, and Yolo Counties.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas. Additionally, this species is known only from Colusa, Contra Costa, Lake, Merced, Riverside, San Bernardino, San Diego, Solano, Tulare, and Yolo Counties. Direct impacts to this species are not expected. Additionally, there are no records of this species occurring in the project vicinity.
<i>Nama stenocarpa</i> <b>Mud nama</b>	US: – CA: 2B.2 NCCP: –	Lake shores, riverbanks, and similar intermittently wet areas at 5 to 500 meters (20 to 1,600 feet) elevation. Known in California from San Diego, Orange, and Riverside Counties and from San Clemente Island. Believed extirpated from Los Angeles and Imperial Counties. Known also from Baja California and Arizona.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas. There is one documented occurrence from 2001 approximately 2 miles from the site.
<i>Navarretia prostrata</i> <b>Prostrate vernal pool navarretia</b>	US: – CA: 1B.2 NCCP: –	Vernal pools, usually alkaline, from 15 to 1,210 meters (50 to 4,000 feet) elevation. Known only from Alameda, Fresno, Los Angeles, Merced, Monterey, Orange, Riverside, San Benito, San Diego, and San Luis Obispo Counties. Presumed extirpated from San Bernardino County.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas.
<i>Nolina cismontana</i> <b>Chaparral nolina</b>	US: – CA: 1B.2 NCCP: –	Sandstone or gabbro in chaparral and coastal sage scrub at 140 to 1,275 meters (500 to 4,200 feet) elevation. Known from Orange, Riverside, San Diego, and Ventura Counties, California.	HP	<b>Moderate.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Pentachaeta aurea</i> ssp. <i>allenii</i> <b>Allen's pentachaeta</b>	US: – CA: 1B.1 NCCP: –	Grasslands and openings in coastal scrub from 75 to 520 meters (250 to 1,700 feet) elevation. Known only from Orange County, California.	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Pentachaeta aurea</i> ssp. <i>aurea</i> <b>Golden-rayed pentachaeta</b>	US: – CA: 4.2 NCCP: –	Found in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland, and valley and foothill grassland	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Phacelia keckii</i> <b>Santiago Peak phacelia</b>	US: – CA: 1B.3 NCCP: –	Closed-cone coniferous forest and chaparral in elevations from 545 to 1,600 meters (1,800 to 5,200 feet). Known from Orange and Riverside Counties. In the western Riverside County area, this species is scarce and known from higher elevations in the Santa Ana Mountains, Agua Tibia Mountains, and Arroyo Seco Creek ( <i>The Vascular Plants of Western Riverside County, California</i> . F.M. Roberts et al., 2004).	HP	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA, this species is not known to occur within the elevation range of the BSA, and direct impacts to the species are not anticipated. Additionally, there are no records of this species occurring in the project vicinity.
<i>Piperia cooperi</i> <b>Chaparral rein orchid</b>	US: – CA: 4.2 NCCP: –	Occurs in chaparral, coastal sage scrub, and oak woodland habitats. Known from Santa Monica Mountains, Simi Hills, and San Gabriel Mountains of the Transverse Ranges; Santa Catalina Island and San Clemente Island of the Channel Islands, and the Santa Ana Mountains and Cuyamaca Mountains of the Peninsular Ranges	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Piperia leptopetala</i> <b>Narrow-petaled rein orchid</b>	US: – CA: 4.3 NCCP: –	Occurs in chaparral and woodland ecosystems such as northern coastal scrub, closed-cone pine forest, yellow pine forest, red fir forest, foothill woodland.	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Pseudognaphalium leucocephalum</i> <b>White rabbit-tobacco</b>	US: – CA: 2B.2 NCCP: –	Sand and gravel at the edges of washes or mouths of steep canyons at 0 to 2,100 meters (0 to 7,000 feet) elevation. In California, known from Los Angeles, Orange, Riverside, Santa Barbara, San Diego, San Luis Obispo, and Ventura Counties. Also occurs in Arizona, New Mexico, Texas, and Mexico.	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Quercus dumosa</i> <b>Nuttall's scrub oak</b>	US: - CA: 1B.1 NCCP: C	On sandy and clay loam soils near the coast within closed-cone coniferous forest, chaparral, and coastal scrub from 15 to 400 meters (50 to 1,300 feet) elevation. In California, known only from western Orange, Santa Barbara, and San Diego Counties. Also known from Baja California.	HP	<b>Low.</b> There is suitable habitat in the BSA and the proposed construction areas. There is one historical occurrence from 1904 documented in the BSA. However, this portion of the BSA consists of developed and ruderal land cover.
<i>Quercus engelmannii</i> <b>Engelmann oak</b>	US: – CA: 4.2 NCCP: –	Chaparral, woodland, and grassland, from 120 to 1,300 meters (400 to 4,300 feet) elevation. Known from Los Angeles, Orange, Riverside, and San Diego Counties and from northern Baja California.	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Romneya coulteri</i> <b>Coulter's Matilija poppy</b>	US: – CA: 4.2 NCCP: C	Dry washes, banks near washes, canyons, and steep northern slopes in coastal sage scrub and chaparral away from the immediate coast, below 1,220 meters (4,000 feet) elevation. Known only from Los Angeles, Orange, Riverside and San Diego Counties.	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.

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<i>Scutellaria bolanderi</i> ssp. <i>austromontana</i> <b>Southern mountains skullcap</b>	US: – CA: 1B.2 NCCP: –	Mesic areas in gravelly soils of stream banks or in oak or pine woodland (rarely chaparral) at 425 to 2,000 meters (1,400 to 6,600 feet) elevation. Known from Riverside and San Diego Counties. Believed extirpated from San Bernardino County and perhaps Los Angeles County.	HP	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA, this species is not known to occur within range of the area, and direct impacts to the species are not anticipated. Additionally, there are no records of this species occurring in the project vicinity.
<i>Selaginella cinerascens</i> <b>Ashy spike-moss</b>	US: – CA: 4.1 NCCP: –	Chaparral and coastal scrub at 20 to 640 meters (60 to 2,100 feet) elevation. In California, known only from Orange and San Diego Counties, but may occur in Riverside County. Also occurs in Mexico.	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Senecio aphanactis</i> <b>Chaparral ragwort</b>	US: – CA: 1B.2 NCCP: –	Openings (especially alkaline flats) in cismontane woodland, coastal sage scrub, and chaparral at 15 to 800) meters (50 to 2,600 feet) elevation. Known in California from Alameda, Contra Costa, Fresno, Los Angeles, Merced, Monterey, Orange, Riverside, Santa Barbara, Santa Clara, San Diego, San Luis Obispo, Solano, and Ventura Counties. Also occurs in Baja California.	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Sidalcea neomexicana</i> <b>Salt Spring checkerbloom</b>	US: – CA: 2B.2 NCCP: –	Alkaline springs and brackish marshes below 1,530 meters (5,000 feet) elevation. In California, known only from Kern, Orange, Riverside, San Bernardino, San Diego, and Ventura Counties. Believed extirpated from Los Angeles County. Also known from Arizona, New Mexico, Nevada, Utah, and Mexico.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas. Multiple CNDDB occurrences are documented in the project vicinity.
<i>Suaeda esteroa</i> <b>Estuary seablite</b>	US: – CA: 1B.2 NCCP: –	Coastal salt marshes below 5 meters (15 feet) elevation. Occurs along immediate coast from Santa Barbara County to Baja California.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas. Additionally, there are no records of this species occurring in the project vicinity.
<i>Symphyotrichum defoliatum</i> <b>San Bernardino aster</b>	US: – CA: 1B.2 NCCP: –	Vernally wet sites (such as ditches, streams, and springs) in many plant communities below 2,040 meters (6,700 feet) elevation. In California, known from Ventura, Kern, San Bernardino, Los Angeles, Orange, Riverside, and San Diego Counties. May also occur in San Luis Obispo County. In the western Riverside County area, this species is scarce, and documented only from Temescal and San Timoteo Canyons ( <i>The Vascular Plants of Western Riverside County, California</i> . F.M. Roberts et al., 2004).	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas. Additionally, there are no records of this species occurring in the project vicinity.
<i>Tetracoccus dioicus</i> <b>Parry's tetracoccus</b>	US: – CA: 1B.2 NCCP: –	Dry stony slopes in chaparral and coastal sage scrub at 165 to 1,000 meters (500 to 3,300 feet) elevation. Known in California only from Orange, Riverside, and San Diego Counties. Also occurs in Mexico.	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Tortula californica</i> <b>California screw moss</b>	US: – CA: 1B.2 NCCP: –	Rock outcrops, vertical rock walls and soil banks with appropriate moisture conditions, at 10 to 1,460 meters (30 to 4,800 feet) elevation. Known only from Modoc, Kern, Los Angeles, Modoc, Monterey, Riverside, San Diego, Santa Barbara, and Ventura Counties, California.	HP	<b>Low.</b> There is potentially suitable habitat in the BSA and the proposed construction areas. However, there are no records of this species occurring in the project vicinity.
<i>Verbesina dissita</i> <b>Big-leaved crown-beard</b>	US: FT CA: ST/1B.1 NCCP: –	Steep, rocky, primarily north-facing slopes in maritime chaparral at 45 to 210 meters (150 to 700 feet) elevation within 1.5 miles of the ocean, and rarely in coastal sage scrub near the bottoms of south-facing slopes opposite north-facing slopes of maritime chaparral. Known only from Orange County in central and southern areas of Laguna Beach, and from Baja California.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas. Additionally, there are no records of this species occurring in the project vicinity.
<b>INVERTEBRATES</b>				
<i>Bombus crotchii</i> <b>Crotch's bumble bee</b>	US: – CA: SCE NCCP: –	Inhabits open scrub and grassland from coastal California to crest of Sierra-Cascade and in desert edge areas, south into Mexico. Primarily nests underground. Suitable bumble bee habitat requires the continuous availability of flowers on which to forage throughout the duration of the colony (spring through fall), colony nest sites, and overwintering sites for the queens.	HP	<b>High.</b> Suitable habitat is present within the BSA and the proposed construction areas. Multiple CNDDB occurrences are documented within the project vicinity.
<i>Branchinecta sandiegonensis</i> <b>San Diego fairy shrimp</b>	US: FE CA: SA NCCP: C	Small, shallow (usually less than 30 centimeters deep), relatively clear but unpredictable vernal pools on coastal terraces. Pools must retain water for a minimum of 13 days for this species to reproduce (3 to 8 days for hatching, and 10 to 20 days to reach reproductive maturity). Known from Orange and San Diego Counties, and Baja California.	HP	<b>Low.</b> Suitable habitat is potentially present within the BSA and/or the proposed construction areas. Multiple CNDDB occurrences are documented within the project vicinity. However, they are all presumed extant and they are known to occur within the adjacent NCCP reserve (outside BSA).
<i>Danaus plexippus</i> (wintering sites) <b>Monarch butterfly</b>	US: PT CA: SA/SCE NCCP: –	Winter roosts are located in wind-protected tree groves (Eucalyptus, Monterey Pine, Cypress) with nectar and water sources nearby.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas.



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<i>Euphydryas editha quino</i> <b>Quino checkerspot butterfly</b>	US: FE CA: SA NCCP: C	Meadows or openings within coastal sage scrub or chaparral below about 5,000 feet where food plants ( <i>Plantago erecta</i> and/or <i>Orthocarpus purpurascens</i> ) are present. Historically known from Santa Monica Mountains to northwest Baja California; currently known only from southwestern Riverside County, southern San Diego County, and northern Baja California.	HP	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA, this species is not known to occur within range of the area, and direct impacts to the species are not anticipated. Additionally, there are no records of this species occurring in the project vicinity.
<i>Haliotis cracherodii</i> <b>Black abalone</b>	US: FE CA: – NCCP: –	Marine intertidal and splash zone communities. Mid to low rocky intertidal areas.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas.
<i>Haliotis sorenseni</i> <b>White abalone</b>	US: FE CA: – NCCP: –	Marine intertidal and splash zone communities. Rocky pinnacles and deep reefs in Southern California, especially those off the Channel Islands. Live at depths of at least 24 meters (80 feet) to over 61 meters (200 feet).	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas.
<i>Streptocephalus woottoni</i> <b>Riverside fairy shrimp</b>	US: FE CA: SA NCCP: C	Warm-water vernal pools (i.e., large, deep pools that retain water into the warm season) with low to moderate dissolved solids, in annual grassland areas interspersed through chaparral or coastal sage scrub vegetation. Suitable habitat includes some artificially created or enhanced pools, such as some stock ponds, that have vernal pool like hydrology and vegetation. Known from areas within about 50 miles of the coast from Ventura County south to San Diego County and Baja California.	HP	<b>Low:</b> While there is potentially suitable habitat in the BSA, direct impacts to the species are not anticipated. Multiple CNDDDB occurrences are documented within the project vicinity. However, they are all presumed extant.
<b>FISH</b>				
<i>Acipenser medirostris</i> <b>Green sturgeon sDPS</b>	US: FT CA: SSC NCCP: –	These are the most marine species of sturgeon. Abundance increases northward of Point Conception. Spawns in the Sacramento, Klamath, and Trinity Rivers. Spawns at temps between 8°C and 14°C (46°F and 57°F). Preferred spawning substrate is large cobble, but can range from clean sand to bedrock.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas.
<i>Eucyclogobius newberryi</i> <b>Tidewater goby</b>	US: FE CA: SSC NCCP: –	Brackish water habitats along the California coast from Agua Hedionda Lagoon (San Diego County) to the mouth of the Smith River (Del Norte County). Found in shallow lagoons and lower stream reaches.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas.
<i>Gila orcuttii</i> <b>Arroyo chub</b>	US: – CA: SSC NCCP: –	Perennial streams or intermittent streams with permanent pools; slow water sections of streams with mud or sand substrates; spawning occurs in pools. Native to Los Angeles, San Gabriel, San Luis Rey, Santa Ana, and Santa Margarita River systems; introduced in Santa Ynez, Santa Maria, Cuyama, and Mojave River systems and smaller coastal streams.	HA	<b>High.</b> Suitable habitat is present within the BSA. However, project is not proposing impacts to arroyo chub habitat.
<i>Oncorhynchus mykiss irideus</i> <b>Southern California steelhead DPS</b>	US: FE CA: SA NCCP: –	Federal listing refers to runs in coastal basins from the Santa Maria River, south to the southern extent of the range (presently considered to be Malibu Creek. Proposed rulemaking 12/19/2000 to extend southern portion of the range to San Mateo.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas.
<i>Rhinichthys osculus</i> ssp. 3 <b>Santa Ana speckled dace</b>	US: – CA: SSC NCCP: –	Found in the headwaters of the Santa Ana and San Gabriel River drainages. Found in riffles in small streams and shore areas with abundant gravel and rock.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or proposed construction areas.
<b>AMPHIBIANS</b>				
<i>Anaxyrus (Bufo) californicus</i> <b>Arroyo toad</b>	US: FE CA: SSC NCCP: C	Washes and arroyos with open water; sand or gravel beds; for breeding, pools with sparse overstory vegetation. Coastal and a few desert streams from Santa Barbara County to Baja California.	HP	<b>High:</b> There is suitable habitat in the BSA and the proposed construction areas. Multiple CNDDDB occurrences are documented in the project vicinity.
<i>Spea hammondi</i> <b>Western spadefoot toad</b>	US: PE CA: SSC NCCP: C	Grasslands and occasionally hardwood woodlands; largely terrestrial but requires rain pools or other ponded water persisting at least three weeks for breeding; burrows in loose soils during dry season. Occurs in the Central Valley and adjacent foothills, the non-desert areas of southern California, and Baja California.	HP	<b>High:</b> There is suitable habitat in the BSA and the proposed construction areas. Multiple CNDDDB occurrences are documented in the project vicinity.
<i>Taricha torosa</i> <b>Coast Range newt</b>	US: – CA: SSC NCCP: –	Breeds in ponds, reservoirs, and slow-moving streams with long-lasting (at least through July), clean water; uses nearby upland areas including grassland, chaparral, and woodland; coastal drainages from Mendocino County south to San Diego County, with populations from San Luis Obispo County south designated as sensitive.	HP	<b>Low.</b> While there is potentially suitable habitat in the BSA, suitable habitat is absent from the proposed construction areas. Direct impacts to this species are not expected.
<b>REPTILES</b>				
<i>Actinemys pallida</i> <b>Southwestern pond turtle</b>	US: FC CA: SSC NCCP: –	Inhabits permanent or nearly permanent water. Absent from desert regions, except in the Mojave Desert along the Mojave River and its tributaries. Requires basking sites such as partially submerged logs, rocks, or open mud banks.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or proposed construction areas.



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<i>Anniella stebbinsi</i> <b>Southern California legless lizard</b>	US: – CA: SSC NCCP: –	Inhabits sandy or loose loamy soils with high moisture content under sparse vegetation in Southern California.	HP	<b>Moderate.</b> While there is potentially suitable habitat in the BSA, suitable habitat is absent from the proposed construction areas. Direct impacts to this species are not expected. Two CNDDDB occurrences are documented within the project vicinity.
<i>Arizona elegans occidentalis</i> <b>California glossy snake</b>	US: – CA: SSC NCCP: –	Scrub and grassland habitats, often with loose or sandy soils. Patchily distributed from the eastern portion of San Francisco Bay to southern San Joaquin Valley and in non-desert areas of southern California. Also occurs in Baja California, Mexico.	HP	<b>Low:</b> While there is potentially suitable habitat in the BSA, direct impacts to the species are not anticipated. Multiple CNDDDB occurrences are documented within the project vicinity.
<i>Aspidoscelis hyperythra</i> <b>Orange-throated whiptail</b>	US: – CA: SA NCCP: C	Prefers washes and other sandy areas with patches of brush and rocks, in chaparral, coastal sage scrub, juniper woodland, and oak woodland from sea level to 915 meters (3,000 feet) elevation. Perennial plants required. Occurs in Riverside, Orange, San Diego Counties west of the crest of the Peninsular Ranges, in extreme southern San Bernardino County near Colton, and in Baja California.	HP	<b>Low.</b> While there is potentially suitable habitat in the BSA, suitable habitat is absent from the proposed construction areas. Direct impacts to this species are not expected. Multiple CNDDDB occurrences are documented within the project vicinity.
<i>Aspidoscelis tigris stejnegeri</i> <b>Coastal western whiptail</b>	US: – CA: SSC NCCP: C	Woodlands, riparian areas, and sparsely vegetated areas in a wide variety of habitats including coastal sage scrub and sparse grassland. Occurs in valleys and foothills from Ventura County to Baja California.	HP	<b>Moderate.</b> While there is potentially suitable habitat in the BSA, suitable habitat is absent from the proposed construction areas. Direct impacts to this species are not expected. Multiple CNDDDB occurrences are documented within the project vicinity.
<i>Caretta caretta</i> <b>North Pacific loggerhead sea turtle</b>	US: FE CA: – NCCP: –	Loggerhead turtles are found worldwide, primarily in subtropical and temperate regions of the Atlantic, Pacific, and Indian Oceans, and in the Mediterranean Sea. In the Atlantic, the loggerhead turtle's range extends from Newfoundland to Argentina. In the eastern Pacific, loggerheads have been reported from Alaska to Chile.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or proposed construction areas.
<i>Chelonia mydas</i> <b>Green sea turtle</b>	US: FT CA:- NCCP: –	Marine; completely herbivorous; needs adequate supply of seagrasses and algae.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or proposed construction areas.
<i>Coleonyx variegatus abbotti</i> <b>San Diego banded gecko</b>	US: – CA: SSC NCCP: –	Often associated with rocks. Coastal sage scrub and chaparral, most often on granite or rocky outcrops in these habitats. Interior Ventura County south.	HP	<b>Low:</b> While there is potentially suitable habitat in the BSA, suitable habitat is absent from the proposed construction areas. Direct impacts to this species are not expected. This species has been documented from 1996 to 2004.
<i>Crotalus ruber</i> <b>Red diamond rattlesnake</b>	US: – CA: SSC NCCP: C	Desert scrub, thornscrub, open chaparral and woodland; occasional in grassland and cultivated areas. Prefers rocky areas and dense vegetation. Morongo Valley in San Bernardino and Riverside Counties to the west and south into Mexico.	HP	<b>High:</b> There is suitable habitat in the BSA and the proposed construction areas. Multiple CNDDDB occurrences are documented in the project vicinity.
<i>Dermochelys coriacea</i> <b>Leatherback sea turtle</b>	US: FE CA: – NCCP: –	Occurs in the Atlantic, Pacific, and Indian oceans. Nesting beaches are primarily located in tropical latitudes around the world. Western Pacific leatherbacks feed off the Pacific coast of North America and migrate across the Pacific to nest in Indonesia, Papua New Guinea, and the Solomon Islands.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or proposed construction areas.
<i>Lepidochelyx oxivacea</i> <b>Olive ridley sea turtle</b>	US: FT CA: – NCCP: –	Mainly a pelagic (open ocean) sea turtle, observed by trans-Pacific ships over 2,400 miles from shore, but they are also known to inhabit coastal areas.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas.
<i>Phrynosoma blainvillii (coronatum)</i> <b>Coast horned lizard</b>	US: – CA: SSC NCCP: C	Primarily in sandy soil in open areas, especially washes and floodplains, in many plant communities. Requires open areas for sunning, bushes for cover, patches of loose soil for burial, and an abundant supply of ants or other insects. Occurs west of the deserts from northern Baja California north to Shasta County below 2,400 meters (8,000 feet) elevation.	HP	<b>High.</b> While there is potentially suitable habitat in the BSA, suitable habitat is absent from the proposed construction areas. Direct impacts to this species are not expected.
<i>Plestiodon (Eumeces) skiltonianus interparietalis</i> <b>Coronado skink</b>	US: – CA: SSC NCCP: C	Occurs in variety of plant communities including coastal sage, mesic chaparral, oak woodlands, pinyon-juniper, and riparian woodlands to pine forests. Found west of the deserts from Riverside County to Baja California.	HP	<b>Low:</b> While there is potentially suitable habitat in the BSA, suitable habitat is absent from the proposed construction areas. Direct impacts to this species are not expected. This species has been documented from 1996 and 2004.

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<i>Salvadora hexalepis virgultea</i> <b>Coast patch-nosed snake</b>	US: – CA: SSC NCCP: –	Coastal chaparral, washes, sandy flats and rocky areas. Widely distributed throughout lowlands, up to 2,130 meters (7,000 feet) elevation, of Southern California from coast to the eastern border.	HP	<b>Low:</b> While there is potentially suitable habitat in the BSA, suitable habitat is absent from the proposed construction areas. Direct impacts to this species are not expected. This species has been documented from 1999 and 2004.
<i>Thamnophis hammondi</i> <b>Two-striped garter snake</b>	US: – CA: SSC NCCP: –	Highly aquatic. Only in or near permanent sources of water. Streams with rocky beds supporting willows or other riparian vegetation. From Monterey County to northwest Baja California.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or proposed construction areas.
<i>Thamnophis sirtalis</i> <b>South coast garter snake</b>	US: – CA: SSC NCCP: –	Occurs in marsh, upland habitats near permanent water resources that have riparian vegetation.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or proposed construction areas.
<b>BIRDS</b>				
<i>Accipiter cooperii</i> (nesting) <b>Cooper's hawk</b>	US: – CA: SA NCCP: –	Forages in a wide range of habitats, but primarily in forests and woodlands. These include natural areas as well as human-created habitats such as plantations and ornamental trees in urban landscapes. Usually nests in tall trees (20 to 60 feet) in extensive forested areas (generally woodlots of 4 to 8 hectares with canopy closure of greater than 60 percent). Occasionally nests in isolated trees in more open areas.	HP	<b>Moderate.</b> Suitable nesting and foraging habitat is present within the BSA. However, the last occurrence (101) was in 2005 and presumed extant.
<i>Agelaius tricolor</i> (nesting colony) <b>Tricolored blackbird</b>	US: – CA: ST/SSC (breeding) NCCP: C	Open country. Forages in grassland and cropland habitats. Nests in large groups near fresh water, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, or tall herbs. Seeks cover for roosting in emergent wetland vegetation, especially cattails and tules, and also in trees and shrubs. Occurs in western Oregon, California, and northwestern Baja California.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas.
<i>Aimophila ruficeps canescens</i> <b>Southern California rufous-crowned sparrow</b>	US: – CA: SA NCCP: C	Steep, rocky coastal sage scrub and open chaparral habitats, particularly scrubby areas mixed with grasslands. From Santa Barbara County to northwestern Baja California.	HP	<b>Moderate.</b> Suitable habitat (CSS and chaparral habitat) is present within the BSA.
<i>Ammodramus savannarum</i> (nesting) <b>Grasshopper sparrow</b>	US: – CA: SSC (breeding) NCCP: –	Grasslands, agricultural fields, prairie, old fields and open savanna. Uncommon and very local summer resident on grassy slopes and mesas west of the deserts. Only rarely in migration and in winter. Coastal Southern California.	HA	<b>Low.</b> Marginally suitable habitat is present within the BSA and the proposed construction areas.
<i>Aquila chrysaetos</i> (nesting & wintering) <b>Golden eagle</b>	US: – CA: CFP NCCP: C	Generally open country of the Temperate Zone worldwide. Nesting primarily in rugged mountainous country. Uncommon resident in Southern California.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas.
<i>Asio otus</i> (nesting) <b>Long-eared owl</b>	US: – CA: SSC (breeding) NCCP: –	Scarce and local in forests and woodlands throughout much of the Northern Hemisphere. Rare resident in coastal southern California. Nests and roosts in dense willow-riparian woodland and oak woodland, but forages over wider areas. Breeds from valley foothill hardwood up to ponderosa pine habitat.	HP	<b>Low.</b> While there is potentially suitable habitat in the BSA, suitable habitat is absent from the proposed construction areas
<i>Athene cunicularia</i> (burrow sites) <b>Burrowing owl</b>	US: – CA: SSC/SCT/SCE (breeding) NCCP: –	Open country in much of North and South America. Usually occupies ground squirrel burrows in open, dry grasslands, agricultural and range lands, railroad rights-of-way, and margins of highways, golf courses, and airports. Often utilizes man-made structures, such as earthen berms, cement culverts, cement, asphalt, rock, or wood debris piles. They avoid thick, tall vegetation, brush, and trees, but may occur in areas where brush or tree cover is less than 30 percent.	HP	<b>Low.</b> Suitable habitat is present within the BSA due to the wide range of land covers this species utilize. Multiple CNDDDB occurrences are documented within the project vicinity. However, they are all presumed extant with the latest observation being from 2019 (2320).
<i>Buteo regalis</i> (wintering) <b>Ferruginous hawk</b>	US: – CA: SA NCCP: –	Forages in open fields, grasslands and agricultural areas, sagebrush flats, desert scrub, fringes of pinyon-juniper habitats, and other open country in western North America. Not known to breed in California.	HP	<b>Low.</b> While there is potentially suitable habitat in the BSA, suitable habitat is absent from the proposed construction areas.
<i>Campylorhynchus brunneicapillus sandiegensis</i> <b>Coastal cactus wren</b>	US: – CA: SSC (year round) NCCP: C	Inhabits coastal sage scrub, nesting almost exclusively in thickets of cholla ( <i>Opuntia prolifera</i> ) and prickly pear ( <i>Opuntia littoralis</i> and <i>Opuntia oricola</i> ), typically below 150 meters (500 feet) elevation. Found in coastal areas of Orange County and San Diego Counties, and extreme northwestern Baja California, Mexico.	HP	<b>Low.</b> While there is potentially suitable habitat in the BSA, suitable habitat is absent from the proposed construction areas.

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<i>Charadrius alexandrinus nivosus</i> (nesting) <b>Western snowy plover</b>	US: FT (coastal population) CA: SSC NCCP: –	Sandy coastal beaches, lakes, alkaline playas. Scattered locations along coastal California and Channel Islands, inland at Salton Sea and at various alkaline lakes.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas.
<i>Circus hudsonius</i> (nesting) <b>Northern harrier</b>	US: – CA: SSC (breeding) NCCP: C	Marshy habitats, grassland and other open country; uncommon in open desert and brushlands. Nests on the ground in open (treeless) wetland and upland areas, including cultivated cropland and dry grassland. Nests usually constructed in tall, dense clumps of vegetation. Found in the Temperate Zone worldwide.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or the proposed construction areas.
<i>Elanus leucurus</i> (nesting) <b>White-tailed kite</b>	US: – CA: CFP NCCP: –	Typically nests in riparian trees such as oaks, willows, and cottonwoods at low elevations. Forages in open country. Found in South America and in southern areas and along the western coast of North America.	HP	<b>Moderate.</b> While there is potentially suitable habitat in the BSA, direct impacts to this species are not expected. Multiple CNDDDB occurrences are documented within the project vicinity.
<i>Empidonax traillii extimus</i> <b>Southwestern willow flycatcher</b>	US: FE CA: SE NCCP: C	Rare and local breeder in extensive riparian areas of dense willows or (rarely) tamarisk, usually with standing water, in the southwestern U.S. and possibly extreme northwestern Mexico. Winters in Central and South America. Below 6,000 feet elevation.	HP	<b>Moderate.</b> While there is potentially suitable habitat in the BSA, no individuals were observed during the riparian bird (least bell's vireo and southwestern willow flycatcher) protocol survey.
<i>Eremophila alpestris actia</i> <b>California horned lark</b>	US: – CA: SA NCCP: –	Open grasslands and fields, agricultural area, open montane grasslands. This subspecies is resident from northern Baja California northward throughout non-desert areas to Humboldt County, including the San Joaquin Valley and the western foothills of the Sierra Nevada (north to Calaveras County). Prefers bare ground such as plowed or fall-planted fields for nesting, but may also nest in marshy soil. During the breeding season, this is the only subspecies of horned lark in non-desert southern California; however, from September through April or early May, other subspecies visit the area.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or proposed construction areas.
<i>Icteria virens</i> (nesting) <b>Yellow-breasted chat</b>	US: – CA: SSC (breeding) NCCP: –	Riparian thickets of willow, brushy tangles near watercourses. Nests in riparian woodland throughout much of western North America. Winters in Central America.	HP	<b>Low.</b> While there is potentially suitable habitat in the BSA, direct impacts to this species are not expected. None were observed during the least bell's vireo and southwestern willow flycatcher protocol survey.
<i>Pandion haliaetus</i> (nesting) <b>Osprey</b>	US: – CA: SA NCCP: –	Eats mostly live fish caught in shallow water. Occurs along coasts and at inland water bodies throughout much of the Americas. In California, winters in many areas but breeds primarily in the northern part of the state.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or proposed construction areas.
<i>Plegadis chihi</i> (nesting colony) <b>White-faced ibis</b>	US: – CA: SA NCCP: –	Winters locally in wet meadows, shallow freshwater marshes, ponds, lakes, rivers, flooded fields, and estuaries. May frequent brackish areas or feed in flooded fields. Known rookery in western Riverside County. In the Coachella Valley and Imperial Valley, this species primarily occurs in irrigated agricultural lands, particularly alfalfa and wheat.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or proposed construction areas.
<i>Polioptila californica californica</i> <b>Coastal California gnatcatcher</b>	US: FT CA: SSC NCCP: C	Inhabits coastal sage scrub in low-lying foothills and valleys up to about 500 meters (1,640 feet) elevation in cismontane southwestern California and Baja California.	HP	<b>Moderate.</b> While there is potentially suitable habitat in the BSA, suitable habitat is present in certain areas of the proposed construction areas. Protocol presence/absence survey was conducted and none were observed.
<i>Setophagia petechia</i> (nesting) <b>Yellow warbler</b>	US: – CA: SSC (breeding) NCCP: –	Riparian woodland while nesting in the western U.S. and northwestern Baja California; more widespread in brushy areas and woodlands during migration. Occurs from western Mexico to northern South America in winter. Migrants are widespread and common. Three subspecies breed in California: <i>morcomi</i> , <i>brewsteri</i> , and <i>sonorana</i> . (Sonoran yellow warbler nests along the Colorado River.)	HP	<b>High:</b> Suitable habitat is present within the BSA and the proposed construction areas. This species was also observed when conducting the riparian bird (least bell's vireo and southwestern willow flycatcher) protocol survey.
<i>Sternula antillarum browni</i> (nesting colony) <b>California least tern</b>	US: FE CA: SE/CFP NCCP: –	Nests along the coast from San Francisco Bay south to northern Baja California. Forages in shallow water. Colonial breeder on bare or sparsely vegetated, flat substrates, sand beaches, alkali flats, landfills, or paved areas.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or proposed construction areas.
<i>Strix occidentalis occidentalis</i> <b>California spotted owl</b>	US: – CA: SSC (year round) NCCP: –	Dense growth, older forests with underbrush for nesting, roosting and foraging. Occur within mid-elevation ponderosa pine, mixed conifer, white fir, and mixed-evergreen forest types and sometimes lower elevation oak woodlands of the western foothills	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or proposed construction areas.

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<i>Vireo bellii pusillus</i> <b>Least Bell's vireo</b>	US: FE CA: SE NCCP: C	Riparian forests and willow thickets. The most critical structural component of Least Bell's Vireo habitat in California is a dense shrub layer 2 to 10 feet (0.6–3.0 meter) above ground. Willows usually dominant. Nests from central California to northern Baja California. Winters in southern Baja California.	HP	<b>Moderate.</b> While there is potentially suitable habitat in the BSA, no individuals were observed during the riparian bird (least bell's vireo and southwestern willow flycatcher) protocol survey.
<b>MAMMALS</b>				
<i>Antrozous pallidus</i> <b>Pallid bat</b>	US: – CA: SSC NCCP: –	Most common in open, dry habitats with rocky areas for roosting. Day roosts in caves, crevices, rocky outcrops, tree hollows or crevices, mines and occasionally buildings, culverts, and bridges. Night roosts may be more open sites, such as porches and open buildings. Grasslands, shrublands, woodlands, and forest in western North America.	HP	<b>Moderate.</b> Potential suitable night roosting and foraging habitat for this species is present. Multiple CNDDB occurrences are documented within the project vicinity. However, they are all presumed extant.
<i>Arctocephalus townsendi</i> <b>Guadalupe fur seal</b>	US: FT CA: ST/CFP NCCP: –	Marine intertidal and splash zone communities, protected deepwater coastal communities. Breeds on Isla de Guadalupe off of Mexico and is occasionally found on San Miguel, San Nicolas, and San Clemente Islands. Prefers shallow, nearshore island water, with cool and sheltered rocky areas for haul-outs.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or proposed construction areas.
<i>Balaenoptera borealis</i> <b>Sei whale</b>	US: FE CA: – NCCP: –	Has a wide distribution and lives in subtropical, temperate, and subpolar waters around the world. Prefers temperate waters in the mid-latitudes and can be found in the Atlantic, Indian, and Pacific oceans.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or proposed construction areas.
<i>Balaenoptera musculus</i> <b>Blue whale</b>	US: FE CA: – NCCP: –	Found in all oceans except the Arctic. Along the West Coast of the United States, eastern North Pacific blue whales are believed to spend winters off of Mexico and Central America. They likely feed during summer off the United States West Coast and, to a lesser extent, in the Gulf of Alaska and central North Pacific waters.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or proposed construction areas.
<i>Balaenoptera physalus</i> <b>Fin whale</b>	US: FE CA: – NCCP: –	Typically found in deep, offshore waters of all major oceans, primarily in temperate to polar latitudes.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or proposed construction areas.
<i>Chaetodipus californicus femoralis</i> <b>Dulzura pocket mouse</b>	US: – CA: SSC NCCP: –	Found in a variety of habitats including coastal sage scrub, chaparral and grassland in northern Baja California, San Diego and extreme southwestern and western Riverside Counties. Limit of range to northwest (at interface with <i>C. c. dispar</i> ) unclear.	HA	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA, this species is not known to occur within range of the area, and direct impacts to the species are not anticipated.
<i>Chaetodipus fallax fallax</i> <b>Northwestern San Diego pocket mouse</b>	US: – CA: SSC NCCP: –	Found in sandy herbaceous areas, usually associated with rocks or coarse gravel in coastal scrub, chaparral, grasslands, and sagebrush, from Los Angeles County through southwestern San Bernardino, western Riverside, and San Diego Counties to northern Baja California.	HA	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA, this species is not known to occur within range of the area, and direct impacts to the species are not anticipated.
<i>Choeronycteris mexicana</i> <b>Mexican long-tongued bat</b>	US: - CA: SSC NCCP: –	Occasionally found in San Diego County, which is on the periphery of their range. Feeds on nectar and pollen of night-blooming succulents. Roosts in relatively well-lit caves, and in and around buildings.	HA	<b>Roosting Not Expected.</b> No suitable roosting habitat for this species is present in the proposed construction areas. However, suitable foraging habitat is present.
<i>Dipodomys stephensi</i> <b>Stephens' kangaroo rat</b>	US: FT CA: ST NCCP: –	Found in plant communities transitional between grassland and coastal sage scrub, with perennial vegetation cover of less than 50%. Most commonly associated with <i>Artemisia tridentata</i> , <i>Eriogonum fasciculatum</i> , and <i>Erodium</i> . Requires well-drained soils with compaction characteristics suitable for burrow construction (neither sandy nor too hard). Not found in soils that are highly rocky or sandy, less than 20 inches deep, or heavily alkaline or clay, or in areas exceeding 25% slope. Occurs only in western Riverside County, northern San Diego County, and extreme southern San Bernardino County, below 915 meters (3,000 feet) elevation. In northwestern Riverside County, known only from east of I-15. Reaches its northwest limit in south Norco, southeast Riverside, and in the Reche Canyon area of Riverside and extreme southern San Bernardino Counties.	HA	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA, this species is not known to occur within range of the area, and direct impacts to the species are not anticipated.
<i>Eubalaena japonica</i> <b>North Pacific right whale</b>	US: FE CA: – NCCP: –	Has occurred historically in all the world's oceans from temperate to subpolar latitudes. Contemporary sightings of right whales have mostly occurred in the central North Pacific and Bering Sea. Sightings have been reported as far south as central Baja California in the eastern North Pacific, as far south as Hawaii in the central North Pacific, and as far north as the sub-Arctic waters of the Bering Sea and sea of Okhotsk in the summer.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or proposed construction areas.

Table 4: Special-Status Plants and Animals Potentially Occurring or Known to Occur in, and/or in the Vicinity of, the BSA

Species Scientific Name & Common Name	Species Status	General Habitat Description	Habitat Present/Absent	Rationale
<i>Eumops perotis californicus</i> <b>Western mastiff bat</b>	US: – CA: SSC NCCP: –	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.; roosts in crevices in vertical cliff faces, high buildings, and tunnels, and travels widely when foraging.	HP	<b>Moderate.</b> Potential suitable night roosting and foraging habitat for this species is present. Multiple CNDDB occurrences are documented within the project vicinity. However, they are all presumed extant.
<i>Lasiurus blossevillei</i> <b>Western red bat</b>	US: CA: SSC NCCP: –	Roosts in the foliage of trees and shrubs, commonly in edge habitats along streams or open fields, and sometimes in orchards or urban areas. Often associated with riparian habitats, particularly those containing sycamores and cottonwoods.	HP	<b>Moderate.</b> Potential suitable roosting and foraging habitat for this species is present.
<i>Megaptera novaeangliae</i> <b>Humpback whale</b>	US: FE CA: – NCCP: –	Lives throughout the world's major oceans. The Mexico population, which breeds along the Pacific coast of Mexico and the Revillagigedo Islands, transits the Baja California peninsula, and feeds across a broad range from California to the Aleutian Islands, Alaska.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or proposed construction areas.
<i>Neotoma lepida intermedia</i> <b>San Diego desert woodrat</b>	US: – CA: SSC NCCP: C	Found in desert scrub and coastal sage scrub habitat, especially in association with cactus patches. Builds stick nests around cacti, or on rocky crevices. Occurs along the Pacific slope from San Luis Obispo County to northwest Baja California.	HA	<b>Low.</b> While there is potentially suitable habitat in the BSA, suitable habitat is absent from the proposed construction areas.
<i>Nyctinomops femorosaccus</i> <b>Pocketed free-tailed bat</b>	US: – CA: SSC NCCP: –	Usually associated with cliffs, rock outcrops, or slopes. May roost in buildings (including roof tiles) or caves. Rare in California, where it is found in Riverside, San Diego, Imperial and possibly Los Angeles Counties. More common in Mexico.	HP	<b>Not Expected.</b> While there are buildings within the vicinity of the BSA that could provide areas for roosting, direct impacts to this species are not anticipated within the proposed construction areas.
<i>Onychomys torridus ramona</i> <b>Southern grasshopper mouse</b>	US: – CA: SSC NCCP: –	Believed to inhabit sandy or gravelly valley floor habitats with friable soils in open and semi-open scrub, including coastal sage scrub, mixed chaparral, low sagebrush, riparian scrub, and annual grassland with scattered shrubs, preferring low to moderate shrub cover. More susceptible to small- and large-scale habitat loss and fragmentation than most other rodents, due to its low fecundity, low population density, and large home range size. Arid portions of southwestern California and northwestern Baja California.	HP	<b>Low.</b> While there is potentially suitable habitat in the BSA, suitable habitat is absent from the proposed construction areas.
<i>Orcinus orca</i> <b>Killer whale (southern resident)</b>	US: FE CA: – NCCP: –	Found in all oceans. While they are most abundant in colder waters like Antarctica, Norway, and Alaska, they are also found in tropical and subtropical waters. Resident killer whales have been seen from California to Russia. They are not, however, exclusively “offshore,” as they are sometimes seen in coastal nearshore waters.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or proposed construction areas.
<i>Perognathus longimembris pacificus</i> <b>Pacific pocket mouse</b>	US: FE CA: SSC NCCP: C	Historically occupied open habitats on sandy soils along the coast from Los Angeles to the Mexican border. Now known from only four sites in Orange and San Diego Counties.	HP	<b>Not Expected.</b> While there is potentially suitable habitat in the BSA, this species is not known to occur within range of the area, and direct impacts to the species are not anticipated.
<i>Physeter macrocephalus</i> <b>Sperm whale</b>	US: FE CA: – NCCP: –	Inhabits all of the world’s oceans.	HA	<b>Not Expected.</b> Suitable habitat is not present within the BSA or proposed construction areas.
<i>Puma concolor</i> <b>Mountain lion (Southern California/Central Coast ESU)</b>	US: – CA: SCT NCCP: –	Mountain lions have the greatest geographical distribution of any extant mammal in the Americas. They are adapted to diverse habitats from the Yukon in Canada down to the southern Andes in South America. Mountain lions inhabit a wide range of ecosystems, including mountains, forests, deserts, and wetlands. They are primarily seen in the western U.S. An endangered subspecies of mountain lion also remains in Florida.	HP	<b>High.</b> This species is known to occur in and around the vicinity of SR-74 despite no records within the CNDDB. The site is not expected to provide adequate cover for dens but footprints were observed between May and September 2025 field surveys. There are several unnamed wildlife crossings and San Juan Creek pass under SR-74 within the BSA that provide opportunities for mountain lion to traverse under SR-74 and, in the case of wildlife crossings, have been documented to support their movement.
<i>Taxidea taxus</i> <b>American badger</b>	US: – CA: SSC NCCP: –	Primary habitat requirements seem to be sufficient food and friable soils in relatively open uncultivated ground in grasslands, woodlands, and desert. Widely distributed in North America.	HP	<b>Low.</b> While there is potentially suitable habitat in the BSA, suitable habitat is absent from the proposed construction areas.

Source 1: *The Vascular Plants of Western Riverside County, California* (Roberts et al. 2004).  
Source 2: California Natural Diversity Database (CDFW 2025a and 2025b).  
Source 3: *A Quantitative Analysis of Pollen Variation in Two Southern California Perennial Helianthus (Heliantheae: Asteraceae)* (Porter and Fraga 2004).  
Status:

Table 4: Special-Status Plants and Animals Potentially Occurring or Known to Occur in, and/or in the Vicinity of, the BSA

Species Scientific Name & Common Name	Species Status	General Habitat Description	Habitat Present/Absent	Rationale
<i>Federal (US)</i> FE = Federally Endangered PE = Proposed Endangered FT = Federally Threatened FC = Federal Candidate for Listing FSC = Federal Species of Concern D = Delisted	<i>State (CA)</i> SE = State Endangered SCE = Candidate Endangered ST= State Threatened SCT = Candidate Threatened SSC = California Species of Special Concern SA = California Special Animal CFP = California Fully Protected Species WL = Watch List	<i>CNPS California Rare Plant Ranking (CRPR) Designations:</i> 1A = Plants presumed extinct in California 1B = Plants rare and endangered in California and throughout their range 2B = Plants rare, threatened, or endangered in California but more common elsewhere in their range 3 = Plants needing more information (a review list) 4 = Plants of limited distribution (a watch list) – not included in this list	<i>CNPS CRPR Threat Codes:</i> 0.1 = Seriously threatened in California 0.2 = Fairly threatened in California 0.3 = Not very threatened in California	<i>NCCP</i> C = Covered under the Orange County Central-Coastal Natural Community Conservation Plan/Habitat Conservation Plan

°C = degrees Celsius  
°F = degrees Fahrenheit  
BSA = Biological Study Area  
CDFW = California Department of Fish and Wildlife  
CNDDDB = California Natural Diversity Database  
CNPS = California Native Plant Society  
CSS = coastal sage scrub  
DPS = distinct population segment  
ft = foot/feet  
HA = habitat absent  
HP = habitat present  
I-15 = Interstate 15  
NCCP = Natural Community Conservation Plan  
P = Present (species observed within the BSA during surveys)  
sDPS = southern distinct population segment  
SR-74 = State Route 74

#### 4. Results: Biological Resources, Discussion of Impacts, and Mitigation

Based on the proposed design, the project will result in temporary impacts to chaparral, coastal sage scrub, coast live oak woodland, ruderal, developed areas and bare ground, and ornamental trees and permanent impacts will occur to ruderal and developed areas and bare ground associated with construction activities (Table 5).

**Table 5: Impacts to Vegetation Communities and Land Covers in the BSA**

Land Cover Type	Permanent Impacts (ac)	Temporary Impacts (ac)
Coastal Sage Scrub	0	0.02
Chaparral	0	0.01
Ruderal	0.01	0.13
Nonnative Grassland	0	0
Southern Cottonwood-Willow Riparian Forest	0	0
Coast Live Oak Woodland	0	0.01
Developed Areas and Bare Ground	0.01	54.06
Ornamental Trees	0	0.01
<b>Total</b>	<b>0.02</b>	<b>54.24</b>

Source: Compiled by LSA (2025).

ac = acre(s)

BSA = Biological Study Area

The project includes pavement rehabilitation, consisting of cold planning and overlaying existing asphalt concrete on general-purpose lanes and shoulders. To support this work, existing loop detectors will be upgraded and restored. These activities will occur within fully developed areas along State Route 74 (SR-74), entirely within the California Department of Transportation (Caltrans) right-of-way (ROW). As such, the impacts from these activities are considered temporary, occurring in areas already subject to regular vehicular traffic, noise, and highway maintenance.

The project also proposes to upgrade two existing metal guardrail systems (MGS) on SR-74 and install 24 new curve warning signs at various locations. The replacement of Metal Beam Guardrail (MBGR) to MGS will be limited within 8 ft from the edge of pavement. The permanent impacts resulted from this structure is limited to installation of steel and anchor poles to support the rail. The proposed each sign poles will be 6x8 inches and will be install 6ft from the edge of pavement. Since the exact locations of the signs will be adjusted in field to avoid permanent impacts to trees. All work will be conducted within the Caltrans ROW.

Temporary impacts associated with construction activities may include vegetation removal, tree trimming, and grubbing. These impacts are also expected in areas

where drainage improvements are proposed, involving the restoration of approximately 168 feet of 3 existing pipe segments at various locations throughout the project limits.

Permanent impacts may include tree removal related to drainage improvements. In addition, temporary impacts to oak and sycamore woodland communities are not anticipated to occur as project activities occur beneath canopy areas within previously disturbed or compacted zones.

Given the scope and location of the proposed work, permanent impacts are expected to be minimal and limited to existing pavement or regularly disturbed areas with Caltrans ROW, and temporary impacts focus on previously disturbed or developed areas.

Mapped vegetation communities within the areas of permanent and temporary impacts are provided in Table 5 below and identified on Figure 5, Impacts to Vegetation and Land Cover Types (9 sheets). The vegetation subject to temporary impacts are located within the right-of-way and SR-74, which is subject to regular vehicular traffic, noise, and highway maintenance. The project is not anticipated to result in any substantial or adverse permanent impacts to biological resources within the Biological Study Area (BSA) due to the regular disturbance within the project footprint and immediate surroundings.

Avoidance and Minimization Measures are included as part of the project to avoid or minimize direct and indirect impacts on biological resources to the extent practicable. The applicable project features and measures have been outlined in the sections below.

#### **4.1 Habitats and Natural Communities of Special Concern**

Habitats are considered to be of special concern based on: (1) federal, State, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of special-status plants or animals occurring in the BSA. Such sensitive habitats are often designated by the California Department of Fish and Wildlife (CDFW) as natural communities of special concern.

Natural communities of special concern within the BSA include: coastal sage scrub, chaparral, southern cottonwood-willow riparian forest, and coast live oak woodland. these natural communities of special concern are discussed in Section 4.1.1 below.

##### **4.1.1 Discussion of Coastal Sage Scrub Habitats**

Coastal sage scrub (CSS) habitat occurs within the BSA. CSS is a vegetation community generally found in diverse mosaics of many species and is dominated by a suite of shrub species found in Southern California. Shrub cover is dense and often continuous but sometimes patchy, with low moisture content. Steep, xeric slopes and quickly draining soils characterize the CSS community. Annual herbs, including weedy grasses and forbs and native wildflowers, are common in openings



and disturbed areas. CSS is a covered habitat type in the Habitat Conservation Plan (HCP). CSS and other scrub types have been displaced by spreading urbanization and livestock grazing. Many rare and endangered species occur in CSS and associated vegetation communities (e.g., coastal California gnatcatcher). Consequently, degradation and displacement of CSS has resulted in considerable habitat loss for a variety of animal species.

#### **4.1.1.1 Survey Results**

In total, 3.82 acres of CSS occur in the BSA. The BSA, which encompasses Caltrans ROW, does not include CSS within the HCP Reserve area. Therefore, the project will not result in impacts to any HCP Reserve areas.

#### **4.1.1.2 Project Impacts**

As shown in Table 5, the project is anticipated to temporarily impact 0.02 acre of CSS habitat. No permanent or temporary impacts to CSS will occur within the HCP Reserve.

Permanent impacts are not anticipated to this vegetation type. Temporary direct impacts to CSS are anticipated due to the use of temporary construction areas needed to carry out Project activities. Vegetation removal or grubbing may be necessary during the installation of drainage improvements, conduit, and guardrail upgrades. Indirect temporary impacts include those generated from construction-related activities such as dust. Dust impacts would not be new to the work site and are considered insignificant since CSS is already affected by the operation of the existing SR-74, and the project activities will be performed over a short period of time. Therefore, the indirect impacts would be minimal and would be substantively minimized or avoided through the implementation of standard construction measures and the avoidance measures detailed below.

#### **4.1.1.3 Avoidance and Minimization Measures**

There are no permanent or direct impacts to CSS habitats proposed as part of the project. Temporary impacts are minor; therefore, no compensatory mitigation is required for natural communities of special concern. The following project Avoidance and Minimization Measures would address indirect temporary impacts to sensitive natural communities:

**BIO-1 Delineation of Environmentally Sensitive Areas.** Prior to construction, highly visible barriers (e.g., orange construction fencing) will be installed along the boundaries of the project footprint to designate Environmentally Sensitive Areas (ESAs) that are to be preserved. ESA habitats that will be subjected to impacts and preserved with fencing include coastal sage scrub, chaparral and coast live oak habitat types. No project activity of any type will be permitted within these ESAs. In addition, heavy equipment, including motor vehicles, will not be allowed to operate within the ESAs. All

construction equipment will be operated in a manner so as to prevent accidental damage to ESAs. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within these protected zones. Silt fence barriers will be installed at the ESA boundary to prevent accidental deposition of fill material in areas where vegetation is immediately adjacent to construction activities.

- BIO-2      Invasive Species Control.** All construction equipment accessing unpaved areas will be cleaned with water prior to delivery on site to remove dirt, seeds, vegetative material, or other debris that could contain or hold seeds of noxious weeds before arriving to and leaving the project site.
- BIO-3      Best Management Practices (BMPs) During Construction.** All equipment maintenance, staging, and dispensing of fuel, oil, or any other such activities will occur in developed or designated non-sensitive upland areas. The designated upland areas will be located in such a manner as to prevent any spill runoff from entering adjacent sensitive vegetation communities. Trash and food waste will be removed from work sites on a daily basis to avoid the attraction of predators that prey on sensitive wildlife species.
- BIO-4      Erosion Control Material Sourcing.** Only certified weed-free straw, mulch, and/or fiber rolls will be used for erosion control. Invasive species will not be used in any landscaping palettes for the project.
- BIO-5      Biological Monitoring.** If vegetation removal shall occur within suitable nesting habitat during the nesting bird season (February 1–September 30), a qualified biologist will monitor construction activities prior to and during vegetation removal for the duration of the project to ensure that practicable measures are being employed to avoid and minimize incidental disturbance of habitat and covered species inside and outside the project footprint.

Any grading and removal of vegetation within temporary impacts to CSS will be replaced with native hydroseed plants.

#### **4.1.2      Discussion of Chaparral Habitats**

Chaparral habitat occurs within the BSA. Chaparral habitats consist of 50 percent of the shrub cover that is composed of evergreen, dark green sclerophyll-leaved, medium-height to tall shrubs that are pre-adapted to occasional wildfires. The chaparral habitats provide suitable habitat for species covered under the HCP and are therefore discussed below.

#### **4.1.2.1 Survey Results**

In total, 5.03 acres of chaparral occurs in the BSA. The BSA, which encompasses Caltrans ROW, does not include chaparral within the HCP Reserve area. Therefore, the project will not result in impacts to any HCP Reserve areas.

#### **4.1.2.2 Project Impacts**

As shown in Table 5, the project is anticipated to result in 0.01 acre of temporary impacts to chaparral. No permanent or temporary impacts to chaparral will occur within the HCP Reserve.

Permanent impacts are not anticipated to this vegetation type. Temporary direct impacts to chaparral habitat are anticipated due to the use of temporary construction areas needed to carry out Project activities. Vegetation removal or grubbing may be necessary during the installation of conduit. Indirect temporary impacts include those generated from construction-related activities such as dust. Dust impacts would not be new to the work site and are considered insignificant since chaparral habitats are already affected by the operation of the existing SR-74, and the project activities will be performed over a short period of time. Therefore, the indirect impacts would be minimal.

#### **4.1.2.3 Avoidance and Minimization Measures**

There are no permanent or direct impacts to chaparral habitats proposed as part of the project. Because chaparral habitats are considered a sensitive natural community, avoidance and minimization efforts are the same as those described in Section 4.1.1.3 for the CSS (i.e., Avoidance and Minimization Measures BIO-1 through BIO-5).

Any grading and removal of vegetation within temporary impacts to chaparral will be replaced with native hydroseed plants.

### **4.1.3 Discussion of Riparian Habitats**

Southern cottonwood-willow riparian forest habitat occurs within the BSA. Riparian vegetation communities are often within the jurisdiction of the United States Army Corps of Engineers (USACE) under the Section 404 permitting requirements and the Regional Water Quality Control Board (RWQCB) under the Section 401 certification requirements; they are typically within the jurisdiction of the CDFW under the Section 1600 permitting requirement and the California Coastal Commission/Local Coastal Program (CCC/LCP) under the California Coastal Act. Riparian habitats are often considered high-value wildlife habitats because they provide protective cover, water, and food for a variety of species.

#### **4.1.3.1 Survey Results**

In total, 0.81 acre of southern cottonwood-willow riparian forest habitat occur in the BSA. The BSA, which encompasses Caltrans ROW, does not include riparian

vegetation within the HCP Reserve area. Therefore, the project will not result in impacts to any HCP Reserve areas.

#### **4.1.3.2 Project Impacts**

The project is not anticipating permanent or temporary impacts to southern cottonwood-willow riparian forest. No permanent or temporary impacts to southern cottonwood-willow riparian forest will occur within the HCP Reserve.

Indirect temporary impacts include those generated from construction-related activities such as dust. Dust impacts would not be new to the work site and are considered insignificant since chaparral habitats are already affected by the operation of the existing SR-74, and the project activities will be performed over a short period of time. Therefore, the indirect impacts would be minimal.

#### **4.1.3.3 Avoidance and Minimization Measures**

There are no permanent, direct, or temporary impacts to southern cottonwood-willow riparian forest habitats proposed as part of the project. The same avoidance and minimization efforts will be applied to riparian habitats as those described in Section 4.1.1.3 (i.e., Avoidance and Minimization Measures BIO-1 through BIO-5) due to this vegetation community occurring nearby the disturbance footprint, where indirect impacts could occur.

#### **4.1.4 Coast Live Oak Woodland Habitat**

Coast live oak woodland occurs within the BSA. Coast live oak woodland can provide habitat for numerous special-status species, and it is considered a sensitive habitat type when occupied by these species. Oak woodland is a covered habitat type in the HCP. Coast live oak woodland is habitat of concern due to residential development and sudden oak death.

##### **4.1.4.1 Survey Results**

In total, 5.40 acres of coast live oak woodland occur within the BSA.

The BSA, which encompasses Caltrans ROW, does not include oak woodland within the HCP Reserve area. Therefore, the project will not result in impacts to any HCP Reserve areas.

##### **4.1.4.2 Project Impacts**

The project is anticipated to result in 0.01 acre of temporary impacts to coast live oak woodland. No permanent or temporary impacts to coast live oak woodland will occur within the HCP Reserve.

Permanent impacts are not anticipated to this vegetation type. Temporary direct impacts to coast live oak woodland habitat are anticipated due to the use of temporary construction areas needed to carry out Project activities. Vegetation trimming may be necessary during construction. Indirect temporary impacts include

those generated from construction-related activities such as dust. Dust impacts would not be new to the work site and are considered insignificant since coast live oak woodland are already affected by the operation of the existing SR-74, and the project activities will be performed over a short period of time. Therefore, the indirect impacts would be minimal.

#### 4.1.4.3 Avoidance and Minimization Measures

The same avoidance and minimization efforts will be applied to coast live oak woodland as those described in Section 4.1.1.3 (i.e., Avoidance and Minimization Measures BIO-1 through BIO-5). If oak trees are to be trimmed, the additional measures below will also be implemented to further avoid and minimize impacts to oaks:

- BIO-6      Avoidance of Native Tree Dripline.** If ground disturbance is to occur within dripline of Oak tree, ESA fencing will be installed around the dripline of retained oak trees to avoid or minimize unnecessary encroachment and prohibit mechanical activity within the root zone. No construction activities, access or placement of structures should occur within the root zone of any retained oak trees. Landscaping, trenching, or irrigation systems should not be installed within the root zone of any retained oak trees. Sedimentation and siltation should be controlled to avoid filling within the root zone or around the base of any retained trees.
- BIO-7      Monitor Retained Oak Trees.** Monitor retained oak trees adjacent to the project during grading and construction activities. Monitoring of retained oak trees should occur at intervals warranted by the site conditions and level of activity. A qualified arborist should conduct all monitoring.
- BIO-8      Conduct Pruning of Retained Oak Trees According to Approved Standards.** All pruning should be directed by an International Society of Arboriculture (ISA) certified arborist and performed by ISA-certified tree workers in accordance with the BMPs for Pruning by the ISA and should adhere to the most recent editions of the American National Standards Institute (ANSI) for Tree Care Operations and Pruning A300, Part 1.

If tree removal is expected to occur within coast live oak woodland, compensatory mitigation would be proposed. In compliance with State Senate Concurrent Resolution No. 17, impacts to any oak trees (excluding California scrub oak [*Quercus berberidifolia*]) with trunk sizes greater than 8 inches in diameter at breast height (DBH) but less than 36 inches DBH will be replaced at a minimum mitigation-to-impact ratio of 1:1, as feasible. Heritage oaks (i.e., oaks with trunk sizes greater than 36 inches DBH) will be replaced at a minimum mitigation-to-impact ratio of 3:1, as feasible.

#### **4.1.5 Discussion of Jurisdictional Aquatic Resources**

Sections 401 and 404 of the Clean Water Act (CWA), the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), and Section 1602 of the California Fish and Game Code regulate activities affecting resources under the respective jurisdiction of the USACE, RWQCB, and CDFW. Waters of the United States (WOTUS) under the jurisdiction of the USACE include navigable coastal and inland waters, lakes, rivers, and streams and their tributaries; interstate waters and their tributaries; wetlands adjacent to such waters; intermittent streams; and other waters that could affect interstate commerce. Waters of the State under the jurisdiction of the RWQCB will typically include all WOTUS as well as areas regulated under the Porter-Cologne Act in the absence of WOTUS. Aquatic resources under the jurisdiction of the CDFW include rivers, streams, or lakes as well as their associated riparian areas.

##### **4.1.5.1 Survey Results**

In total, 30 drainage features were observed within the BSA and are considered jurisdictional (i.e., Features 1 through 30). Five features (i.e., Features 31 through 35), are considered non-jurisdictional. Of the non-jurisdictional features, Features 31 and 32 lacked an OHWM and CDFW streambed, and Features 33, 34, and 35 are limited to a culvert within the JDSA and lack vegetation, including riparian vegetation. (See Figure 4: Jurisdictional Areas [23 Sheets].) This includes 22 earthen drainages (i.e., Features 4, 8 through 12, 14 through 28, and 30), 1 combination concrete and earthen feature (Feature 1), and 7 concrete drainages (i.e., Features 2, 3, 5, 6, 7, 13, and 29). Of those 30 features, 1 feature (i.e., Feature 8) was also delineated as wetland WOTUS under the jurisdiction of the USACE and wetland waters of the State regulated by RWQCB; and 29 features (i.e., Features 1 through 7 and 9 through 30) are considered nonwetland waters of the State regulated by the RWQCB under Section 401 of the CWA or the Porter-Cologne Act. A total of 30 features are subject to jurisdiction by the CDFW under Section 1600 of the California Fish and Game Code, including 9 features that contain CDFW riparian habitat (Features 8, 10, 13, 14, 18, 20, 21, 22, and 30). The total area of delineated features within the Jurisdictional Delineation Study Area (JDSA) includes 0.473 acre of wetland WOTUS and waters of the State (WOTS), 0.931 acre of nonwetland WOTUS, 1.309 acres of RWQCB nonwetland WOTS, 0.979 acre of CDFW streambed and 1.146 acre of CDFW riparian habitats (Table 6 below). These findings and conclusions should be considered preliminary until verified by the appropriate regulatory agencies.

**Table 6: Summary of Jurisdictional Features within the JDSA**

Feature No.	Category	USACE		RWQCB		CDFW	
		Nonwetland WOTUS (acres)	Wetland WOTUS (acres)	Nonwetland WOTS (acres)	Wetland WOTS (acres)	Streambed (acres)	Riparian Habitat (acres)
1	Earthen and Concrete	-	-	0.085	-	-	-
2	Concrete	-	-	0.097	-	0.097	-
3	Concrete	-	-	0.001	-	0.001	-
4	Earthen	-	-	0.016	-	0.016	-
5	Concrete	-	-	0.021	-	0.021	-
6	Concrete	-	-	0.048	-	0.048	-
7	Concrete	-	-	0.023	-	0.023	0.015
8	Earthen	0.809	0.473	0.809	0.473	0.473	0.809
9	Earthen	-	-	0.005	-	0.005	-
10	Earthen	-	-	0.001	-	0.001	-
11	Earthen	-	-	0.001	-	0.001	-
12	Earthen	-	-	0.001	-	0.001	-
13	Concrete	-	-	0.002	-	0.002	0.039
14	Earthen	-	-	0.002	-	0.002	0.053
15	Earthen	-	-	0.001	-	0.001	-
16	Earthen	-	-	0.001	-	0.001	0.001
17	Earthen	-	-	0.001	-	0.001	-
18	Earthen	-	-	0.002	-	0.002	0.039
19	Earthen	-	-	0.001	-	0.001	-
20	Earthen	-	-	0.007	-	0.007	0.075
21	Earthen	-	-	0.001	-	0.001	0.084
22	Earthen	-	-	0.012	-	0.012	-
23	Earthen	-	-	0.001	-	0.001	-
24	Earthen	-	-	0.001	-	0.001	-
25	Earthen	-	-	0.002	-	0.005	-
26	Earthen	-	-	0.011	-	0.011	-
27	Earthen	-	-	0.005	-	0.005	-
28	Earthen	-	-	0.004	-	0.004	-
29	Concrete	-	-	0.025	-	0.025	-
30	Earthen	0.122	-	0.122	-	0.215	0.031
<b>TOTAL</b>		<b>0.931</b>	<b>0.473</b>	<b>1.309</b>	<b>0.473</b>	<b>0.984</b>	<b>1.146</b>

Source: Compiled by LSA (2025).

CDFW = California Department of Fish and Wildlife

JDSA = Jurisdictional Delineation Study Area

RWQCB = Regional Water Quality Control Board

USACE = United States Army Corps of Engineers

WOTS = waters of the State

WOTUS = waters of the United States

#### 4.1.5.2 Project Impacts

##### ***Discussion of Jurisdictional Features Impacted by the Build Alternative.***

Feature 23 is an earthen drainage channel constructed as part of the stormwater drainage system for SR-74. It conveys flows downslope into an earthen drain and may eventually flow into San Juan Creek. Feature 23 originates from a 2 ft diameter culvert and conveys flows to the north. The portion of the feature within the JDSA is approximately 20 LF, with an average width of 3 ft. Flows within the feature are ephemeral, as flowing water was absent at the time of the delineation. The feature is devoid of hydrophytic vegetation and contains ruderal vegetation. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. Feature 23 exhibits a 2 ft wide OHWM and streambed.

The project would temporarily impact 0.001 acre of CDFW streambed and RWQCB nonwetland waters of drainage feature 23. The proposed project would not result in permanent impacts to jurisdictional aquatic resources or temporary or permanent impacts to wetland or nonwetland waters of the U.S.

Such impacts would be avoided or minimized with implementation of the measures outlined below in Section 4.1.5.3. Table 7 provides a breakdown of impacts by drainage feature.

**Table 7: Impacts to Jurisdictional Features within the JDSA**

Feature	Permanent Impacts (ac)	RWQCB Nonwetland Waters	CDFW Streambed	CDFW Riparian
		Temporary Impacts (ac)	Temporary Impacts (ac)	Temporary Impacts (ac)
Feature 23	-	0.001	0.001	-
<b>Grand Total (ac)</b>	<b>0</b>	<b>0.001</b>	<b>0.001</b>	<b>0</b>

Source: Compiled by LSA (2025).

ac = acre(s)

CDFW = California Department of Fish and Wildlife

JDSA = Jurisdictional Delineation Study Area

RWQCB = Regional Water Quality Control Board

##### ***Discussion of Non-Jurisdictional Features Impacted by the Build Alternative.***

As described above in Section 4.1.5.1, Features 31 through 35 are considered non-jurisdictional. Features 31 and 32 are best described as earthen areas constructed as part of the stormwater drainage system for SR-74. Features 33, 34, and 35 are limited to culverts constructed as part of the stormwater drainage system for SR-74. These five features are not considered jurisdictional due to their absence of bed and bank, their absence of an OHWM, and their not appearing to meet the definition of WOTUS per 33 CFR 328.3(b) under Sections (a)(1) through (2). Additionally, they are not relatively permanent and do not have standing or continuously flowing water and therefore do not meet the definitions as outlined in paragraphs (a)(3) or (a)(5). Lastly, these features are not an adjacent wetland as outlined in (a)(4). Features 31



through 35 were not determined to be jurisdictional under Section 401 or Section 404 of the CWA, the Porter-Cologne Act, or Section 1602 of the Fish and Game Code.

#### **4.1.5.3 Avoidance and Minimization Measures**

To avoid impacts to jurisdictional aquatic resources, avoidance and minimization efforts are the same as those described in Section 4.1.3.3 (i.e., Avoidance and Minimization Measures BIO-1 through 5). In addition, the following measures are to be implemented to further avoid and minimize anticipated impacts to jurisdictional aquatic resources.

**BIO-9 Water Quality Certification.** Prior to initiation of construction, Caltrans will coordinate with San Diego RWQCB to determine the need for a Waste Discharge Requirement from the Santa Ana Regional Water Quality Control Board. Upon completion of the coordination effort, Caltrans may need to comply with any conditions and measures identified in the Certification.

**BIO-10 Streambed Alteration Agreement.** Due to limited activities and very minimal impacts (0.001 acre of temporary impacts) to non-riparian streambed, the project isn't expected to result in substantially diverting or obstructing the natural flow, substantially changing or using any material from the bed or bank, or deposit or dispose of debris, waste, or other material where it may pass into any river, stream, or lake. Prior to initiation of construction Caltrans will coordinate with CDFW to determine the need for a Streambed Alteration Agreement (SAA). Upon completion of the coordination effort with the California Department of Fish and Wildlife (CDFW), Caltrans may need to comply with any specifications, conditions, and measures identified in the SAA.

## **4.2 Special-Status Plant Species**

Certain plant species are recognized by federal and State resource agencies as well as private conservation organizations (e.g., the California Native Plant Society [CNPS]) as special-status plant species. An individual taxon (i.e., species, subspecies, or variety) is given such recognition due to the documented or perceived decline and/or limitations of its population size, geographic range, and distribution, which typically are a result of habitat loss. For the purposes of this NES(MI), listed special-status species are considered to be those listed under the federal Endangered Species Act (FESA) and/or California Endangered Species Act (CESA). Non-listed special-status plant species are those plant species that are not State or federally listed but have a California Rare Plant Rank (CRPR) of 1, 2, or 3. Table 3 shows all special-status plant species considered for their potential to occur in the BSA. Refer to Section 3.3 for more information regarding specific "special-status species" definitions.

There are 91 special-status plant species considered for their potential to occur in the BSA (refer to Table 4). Many of these species have specialized habitat requirements that do not occur within the BSA, and these plants are not expected to occur within the proposed work areas. No special-status plant species, including listed species, were observed within the BSA during the 2025 surveys. Seven (7) non-listed special-status plant species were identified as having a moderate potential to occur within the BSA due to the presence of some suitable habitat and known occurrences in the general project vicinity. The 7 species include the non-listed intermediate mariposa-lily (*Calochortus weedii* var. *intermedius*), San Miguel savory (*Calochortus weedii* var. *intermedius*), many-stemmed dudleya (*Dudleya multicaulis*), sticky dudleya (*Dudleya viscida*), mesa horkelia (*Horkelia cuneata* ssp. *puberula*), intermediate monardella (*Monardella hypoleuca* ssp. *intermedia*) and chaparral nolina (*Nolina cismontana*). The remaining special-status plant species identified in Table 4, which either have a low probability of occurring or are not expected to occur within the BSA, are unlikely to be adversely affected by the proposed project activities and therefore are not analyzed further in this NES(MI).

#### **4.2.1 Discussion of Intermediate Mariposa Lily**

Intermediate mariposa lily is a CRPR 1B.2 species but is not listed under FESA or CESA. It is a perennial stoloniferous herb species that occurs in chaparral, coastal scrub, and valley and foothill grasslands, often in dry, rocky soils from 395 to 2,805 feet (120 to 850 meters) in elevation.

##### **4.2.1.1 Survey Results**

Potentially marginal suitable habitat for intermediate mariposa lily is present within the BSA; however, this species was not observed during the 2025 surveys. There are documented occurrences of intermediate mariposa lily within the vicinity of the BSA.

##### **4.2.1.2 Project Impacts**

Direct impacts to intermediate mariposa lily are not expected since the project direct impact area are subject to regular disturbance. The project has a low potential to have indirect impacts to potentially suitable habitat through increased dust during construction, or the introduction of invasive species. Indirect impacts to potentially suitable habitat in the BSA would be considered negligible and avoided to the maximum extent feasible.

##### **4.2.1.3 Avoidance and Minimization Measures**

The project avoidance and minimization measures listed in Section 4.1.1.3 would address any impacts to suitable habitat for intermediate mariposa lily in the project area. No additional measures specific to intermediate mariposa lily are required.

## **4.2.2 Discussion of San Miguel Savory**

San Miguel savory is a CRPR 1B.2 species but is not listed under FESA or CESA. It can be found within heavy, often clay soils or around granitic outcrops in chaparral, coastal sage scrub, and grassland below 790 meters (2,600 feet) in elevation.

### **4.2.2.1 Survey Results**

Potentially marginal suitable habitat for San Miguel savory is present within the BSA; however, this species was not observed during the 2025 surveys. There are documented occurrences of San Miguel savory within the vicinity of the BSA.

### **4.2.2.2 Project Impacts**

Direct impacts to San Miguel savory are not expected since the project direct impact area is subject to regular disturbance. The project has a low potential to have indirect impacts to potentially suitable habitat through increased dust during construction, or the introduction of invasive species. Indirect impacts to potentially suitable habitat in the BSA would be considered negligible and avoided to the maximum extent feasible.

### **4.2.2.3 Avoidance and Minimization Measures**

The project avoidance and minimization measures listed in Section 4.1.1.3 would address any impacts to suitable habitat for San Miguel savory in the project area. No additional measures specific to San Miguel savory are required.

## **4.2.3 Discussion of Many-Stemmed Dudleya**

Many-stemmed dudleya is a CRPR 1B.2 species but is not listed under FESA or CESA. It is a perennial herb species that occurs on dry stony outcrops vegetated with chaparral, coastal scrub, and valley and foothill grasslands, usually in heavy, often clay soils from 45 to 2,370 feet (13 to 715 meters) in elevation.

### **4.2.3.1 Survey Results**

Potentially marginal suitable habitat for many-stemmed dudleya is present within the BSA; however, this species was not observed during the 2025 surveys. There are documented occurrences of many-stemmed dudleya within the vicinity of the BSA.

### **4.2.3.2 Project Impacts**

Direct impacts to many-stemmed dudleya are not expected since project the project direct impact area is subject to regular disturbance. The project has a low potential to have indirect impacts to potentially suitable habitat through increased dust during construction or the introduction of invasive species. Indirect impacts to potentially suitable habitat in the BSA would be considered negligible and avoided to the maximum extent feasible.

#### **4.2.3.3 Avoidance and Minimization Measures**

The project avoidance and minimization measures listed in Section 4.1.1.3 would address any impacts to suitable habitat for many-stemmed dudleya in the project area. No additional measures specific to many-stemmed dudleya are required.

#### **4.2.4 Discussion of Sticky Dudleya**

Sticky dudleya is a CRPR 1B.2 species but is not listed under FESA or CESA. It can be found within rocky areas in coastal bluff scrub, chaparral, coastal sage scrub, and cismontane woodland from 10 to 550 meters (30 to 1,800 feet) in elevation.

##### **4.2.4.1 Survey Results**

Potentially marginal suitable habitat for sticky dudleya is present within the BSA; however, this species was not observed during the 2025 surveys. There are documented occurrences of sticky dudleya within the vicinity of the BSA.

##### **4.2.4.2 Project Impacts**

Direct impacts to sticky dudleya are not expected since the project direct impact area is subject to regular disturbance. The project has a low potential to have indirect impacts to potentially suitable habitat through increased dust during construction, or the introduction of invasive species. Indirect impacts to potentially suitable habitat in the BSA would be considered negligible and avoided to the maximum extent feasible.

##### **4.2.4.3 Avoidance and Minimization Measures**

The project avoidance and minimization measures listed in Section 4.1.1.3 would address any impacts to suitable habitat for sticky dudleya in the project area. No additional measures specific to sticky dudleya are required.

#### **4.2.5 Discussion of Mesa Horkelia**

Mesa horkelia is a CRPR 1B.1 species but is not listed under FESA or CESA. It can be found within sandy or gravelly soils in chaparral, or rarely in cismontane woodland or coastal scrub at 70 to 825 meters (200 to 2,700 feet) in elevation.

##### **4.2.5.1 Survey Results**

Potentially marginal suitable habitat for mesa horkelia is present within the BSA; however, this species was not observed during the 2025 surveys. There are documented occurrences of mesa horkelia within the vicinity of the BSA.

##### **4.2.5.2 Project Impacts**

Direct impacts to mesa horkelia are not expected since the project direct impact area is subject to regular disturbance. The project has a low potential to have indirect impacts to potentially suitable habitat through increased dust during construction, or the introduction of invasive species. Indirect impacts to potentially

suitable habitat in the BSA would be considered negligible and avoided to the maximum extent feasible.

#### **4.2.5.3 Avoidance and Minimization Measures**

The project avoidance and minimization measures listed in Section 4.1.1.3 would address any impacts to suitable habitat for mesa horkelia in the project area. No additional measures specific to mesa horkelia are required.

#### **4.2.6 Discussion of Intermediate Monardella**

Intermediate monardella is a CRPR 1B.3 species but is not listed under FESA or CESA. It can be found within the understory of chaparral, oak woodland, and occasionally coniferous forest at 200 to 1,250 meters (660 to 4,100 feet) elevation.

##### **4.2.6.1 Survey Results**

Potentially marginal suitable habitat for intermediate monardella is present within the BSA; however, this species was not observed during the 2025 surveys. There are documented occurrences of intermediate monardella within the vicinity of the BSA.

##### **4.2.6.2 Project Impacts**

Direct impacts to intermediate monardella are not expected since the project direct impact area is subject to regular disturbance. The project has a low potential to have indirect impacts to potentially suitable habitat through increased dust during construction, or the introduction of invasive species. Indirect impacts to potentially suitable habitat in the BSA would be considered negligible and avoided to the maximum extent feasible.

##### **4.2.6.3 Avoidance and Minimization Measures**

The project avoidance and minimization measures listed in Section 4.1.1.3 would address any impacts to suitable habitat for intermediate monardella in the project area. No additional measures specific to intermediate monardella are required.

#### **4.2.7 Discussion of Chaparral Nolina**

Chaparral nolina is a CRPR 1B.2 species but is not listed under FESA or CESA. It can be found within sandstone or gabbro in chaparral and coastal sage scrub at 140 to 1,275 meters (500 to 4,200 feet) elevation.

##### **4.2.7.1 Survey Results**

Potentially marginal suitable habitat for chaparral nolina is present within the BSA; however, this species was not observed during the 2025 surveys. There are documented occurrences of chaparral nolina within the vicinity of the BSA.

#### 4.2.7.2 Project Impacts

Direct impacts to chaparral nolina are not expected since the project direct impact area is subject to regular disturbance. The project has a low potential to have indirect impacts to potentially suitable habitat through increased dust during construction, or the introduction of invasive species. Indirect impacts to potentially suitable habitat in the BSA would be considered negligible and avoided to the maximum extent feasible. Avoidance and Minimization Efforts/Compensatory Mitigation

The project avoidance and minimization measures listed in Section 4.1.1.3 would address any impacts to suitable habitat for chaparral nolina in the project area. No additional measures specific to chaparral nolina are required.

### 4.3 Special-Status Animal Species

Certain animal species are recognized by federal and State resource agencies as special-status species. Species are given such recognition due to the documented or perceived decline and/or limitations of its population size, geographic range, and distribution, which typically are a result of habitat loss. For the purposes of this discussion, special-status animal species are considered to be those listed under FESA and/or CESA and species considered to be of special concern by the CDFW. Table 4 shows special-status animal species considered for their potential to occur in the BSA.

There were 74 special-status wildlife species considered for their potential to occur in the BSA (refer to Table 4). Most of these species have specialized habitat requirements that do not occur within the BSA and are not expected to occur within the proposed work areas. No listed wildlife species were observed during the 2025 surveys. However, 1 non-listed special-status wildlife species (i.e., yellow warbler) was observed within the BSA during the 2025 surveys. A total of 4 listed special-status animals were identified as having potentially suitable habitat within the BSA, and 11 non-listed special-status wildlife species were identified as having moderate or high potential to occur within the BSA.

Species with a marginal and low suitable habitat within the BSA are:

1. Crotch's bumble bee (*Bombus crotchii*), CA: SCE;
2. Arroyo toad (*Anaxyrus (Bufo) californicus*), US: FE and CA: SSC;
3. Western spadefoot toad (*Spea hammondi*), US: PE and CA: SSC;
4. Yellow warbler (*Setophagia petechia*) CA: SSC;
5. Red diamond rattlesnake (*Crotalus ruber*), CA: SSC; and
6. Mountain lion (*Puma concolor*), CA: SCT.

An additional nine special-status wildlife species were identified as having moderate potential to occur within the BSA due to the presence of suitable habitat:

1. Cooper's hawk (*Accipiter cooperii*), CA: SA;
2. Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), CA: SA;
3. White-tailed kite (*Elanus leucurus*), CA: CFP;
4. Southwestern willow flycatcher (*Empidonax traillii extimus*), US: FE and CA: SE;
5. Coastal California gnatcatcher (*Polioptila californica californica*), US: FT and CA: SSC;
6. Least Bell's vireo (*Vireo bellii pusillus*), US: FE and CA: SE;
7. Pallid bat (*Antrozous pallidus*), CA: SSC;
8. Western mastiff bat (*Eumops perotis californicus*), CA: SSC; and
9. Western red bat (*Lasiurus blossevillii*), CA: SSC.

Furthermore, 19 special-status animal species were identified as having low potential to occur within the BSA due to the presence of little to no suitable habitat:

1. San Diego fairy shrimp (*Branchinecta sandiegonensis*) US: FE/CA: SA;
2. Riverside fairy shrimp (*Streptocephalus woottoni*), US: FE/CA: SA;
3. Coast range newt (*Taricha torosa*), CA: SSC;
4. Southern California legless lizard (*Anniella stebbinsi*), CA: SSC;
5. California glossy snake (*Arizona elegans occidentalis*), CA: SSC;
6. Orange-throated whiptail (*Aspidoscelis hyperythra*), CA: SA;
7. Coastal western whiptail (*Aspidoscelis tigris stejnegeri*), CA: SSC;
8. San Diego banded gecko (*Coleonyx variegatus abbotti*), CA: SSC;
9. Coast horned lizard (*Phrynosoma blainvillii (coronatum)*), CA: SSC;
10. Coronado skink (*Plestiodon (Eumeces) skiltonianus interparietalis*), CA: SSC;
11. Coast patch-nosed snake (*Salvadora hexalepis virgultea*) CA: SSC;
12. Long-eared owl (*Asio otus*), CA: SSC;
13. Burrowing owl (*Athene cunicularia*), CA: SSC/SCT/SCE;
14. Ferruginous hawk (*Buteo regalis*), CA: SA;
15. Coastal cactus wren (*Campylorhynchus brunneicapillus sandiegonensis*), CA: SSC;
16. Yellow-breasted chat (*Icteria virens*), CA: SSC;
17. San Diego desert woodrat (*Neotoma lepida intermedia*), CA: SSC;
18. Southern grasshopper mouse (*Onychomys torridus ramona*), CA: SSC; and
19. American badger (*Taxidea taxus*), CA: SSC.

There are 13 coastal and marine species or groups of species identified in the literature review as potentially occurring within the United States Geological Survey (USGS) topographic quadrangles in which the BSA occurs (refer to Appendix B for the National Oceanic and Atmospheric Administration [NOAA] Fisheries Species List). None of the species identified are expected to occur with the BSA. The project site lacks suitable habitat, as the species identified are typically associated with the Pacific Ocean and its major tributaries and none are expected to occur within the BSA or be affected by the proposed project. These species are not analyzed further in this NES(MI).

Observed special-status wildlife species, listed special-status wildlife species with suitable habitat in the BSA, and non-listed special-status wildlife species with a moderate to high potential to occur in the BSA are discussed below. The remaining special-status animal species identified in Table 4, which either have a low probability of occurring or are not expected to occur within the BSA, are unlikely to be affected by the proposed project activities and therefore are not analyzed further in this NES(MI).

#### **4.3.1 Discussion of Coastal California Gnatcatcher**

Coastal California gnatcatcher (CAGN) was listed as threatened by the USFWS in March 1993. There is no designated critical habitat in the BSA. CAGN is a non-migratory songbird that typically nests and forages in moderately dense stands of CSS below 2,500 feet (762 meters) in elevation in Southern California.

The CAGN is closely associated with CSS, especially when dominated by California sagebrush. Moderately and sparsely vegetated habitats and edges are more often occupied than dense scrub. CAGN is rarely found above 2,500 feet (762 meters) in elevation or in chaparral habitats. Mule fat scrub and ruderal habitats near to CSS are often occupied. Use of alternative habitats such as these and other scrub, riparian, and wooded habitats increases following the nesting season.

##### **4.3.1.1 Survey Results**

CAGN typically occupy CSS natural communities. CSS and other similar habitat to CSS are present in the BSA. No CAGN were observed along SR-74 within Caltrans right-of-way for the proposed project during the 2025 protocol surveys. However, there are many documented occurrences of CAGN within the CSS habitat of the project vicinity that are presumed extant. Nonetheless, construction activities are limited to the existing ROW adjacent to SR-74 within areas that are subject to regular disturbance. Overall, suitable foraging and nesting habitat areas are present in the BSA.

##### **4.3.1.2 Project Impacts**

Direct impacts to CAGN are not expected to occur as a result of the project because CAGN were not observed in the BSA. No habitat documented as being historically occupied by CAGN would be removed by the project. The project is anticipated to result in 0.02 acre of temporary impacts to CSS as part of the installation of drainage improvements.

Indirect temporary effects to marginally suitable CAGN habitat may include increased dust during construction activities and indirect temporary effects to CAGN may include increased noise and vibration during construction activities. With implementation of the avoidance and minimization efforts below, the construction activities that will be performed over a short period of time, and with the presence of existing noise and vibration on a highly traveled portion of SR-74, the indirect



impacts are expected to be minimal. Therefore, the effect determination for CAGN is No Effect.

#### **4.3.1.3 Avoidance and Minimization Measures**

Because CAGN typically occupy CSS and associated natural communities, avoidance and minimization efforts for sensitive natural communities are the same as those described in Section 4.1.1.3 (i.e., Avoidance and Minimization Measures BIO-1 through BIO-5) along with Measure BIO-11 below for nesting birds.

**BIO-11 Avoidance of Breeding Season and Nesting Bird Surveys.**  
Vegetation clearing and grubbing as well as pavement grinding activities shall occur outside the nesting season (February 1–September 30) to the fullest practicable extent. If project activities with potential to indirectly disturb suitable avian nesting habitat within the BSA would occur during the nesting season (as determined by a qualified biologist), a qualified biologist with experience in conducting breeding bird surveys will conduct a nesting bird survey no more than 3 days prior to the initiation of project activities to detect the presence/absence of migratory and resident bird species occurring in suitable nesting habitat. Should nesting birds be found, an exclusionary buffer will be established by the qualified biologist. This buffer will be clearly marked in the field by construction personnel under the guidance of the biologist, and construction and access will not be allowed in this zone until the biologist determines that the young have fledged or the nest is no longer active.

No direct take of CAGN or the removal of occupied habitat or designated critical habitat is expected; therefore, specific compensatory mitigation is not warranted. If CAGN are found during pre-construction surveys or project monitoring and work cannot be completed without avoiding take, Section 7 consultation with the USFWS would be required. While not anticipated, compensatory mitigation may be developed in consultation with the USFWS, if necessary.

#### **4.3.2 Discussion of Least Bell's Vireo**

Least Bell's vireo (LBVI) is a federally and State-endangered species; therefore, its nesting locations are protected. LBVI is a small migratory songbird that nests in Southern California. This species is a rare and local summer resident of Southern California and breeds in willow thickets and lowland riparian woodlands. Suffering from habitat loss and nest interference from the brood-parasitic brown-headed cowbird (*Molothrus ater*), LBVI was extirpated from much of California in the mid- to late 20th century. In Orange County, LBVI has made a remarkable recovery since about 1990 thanks to aggressive management of cowbirds and regional conservation of LBVI habitat. There is no designated critical habitat in the BSA, but suitable habitat is present.

#### **4.3.2.1 Survey Results**

No LBVI were observed during the surveys conducted from May 30 through July 31, 2025. However, one individual was observed within the vicinity of the project north of the BSA and northeast of the intersection of SR-74 and Reata Road within riparian vegetation in San Juan Creek. Marginal suitable habitat is present within areas of the BSA that support southern cottonwood-willow riparian forest.

#### **4.3.2.2 Project Impacts**

Direct impacts to LBVI are not expected to occur as a result of the project because LBVI were not observed in the BSA and suitable habitat would not be impacted by the project. No habitat documented as being historically occupied by LBVI would be removed by the project. Indirect temporary effects to suitable LBVI habitat may include increased dust during project activities in proximity to riparian habitats and indirect temporary effects to LBVI may include increased noise and vibration during project activities in proximity to riparian habitats. With implementation of the avoidance and minimization efforts below, the construction activities that will be performed over a short period of time, and the presence of existing dust, noise and vibration on a highly traveled portion of SR-74, the indirect impacts are expected to be minimal. Therefore, the effect determination for LBVI is No Effect.

#### **4.3.2.3 Avoidance and Minimization Measures**

Because LBVI typically occupy riparian natural communities, avoidance and minimization efforts are the same as those described in Section 4.1.1.3 for the CSS (i.e., Avoidance and Minimization Measures BIO-1 through BIO-5) and Section 4.3.1.3 (i.e., Avoidance and Minimization Measure BIO-11). With successful implementation of these measures, impacts to LBVI would be avoided, and no additional avoidance or minimization measures are warranted.

No direct take of LBVI or designated critical habitat is expected; therefore, specific compensatory mitigation is not warranted. If LBVI is found during pre-construction surveys or project monitoring and work cannot be completed without avoiding take, Section 7 consultation with the United States Fish and Wildlife Service (USFWS) is required, and a CDFW Section 2081 permit may also be required. While not anticipated, compensatory mitigation may be developed in consultation with the USFWS and the CDFW, if necessary.

#### **4.3.3 Discussion of Southwestern Willow Flycatcher**

Southwestern willow flycatcher (SWWF) is a federally and State-endangered species; therefore, its nesting locations are protected. It was listed as endangered by the USFWS in February 1995. There is no designated critical habitat in the BSA. The SWWF is closely associated with riparian habitat and are rare and local breeders in extensive riparian areas of dense willows or (rarely) tamarisk, usually with standing water, in the southwestern United States and possibly extreme northwestern Mexico. This species winters in Central and South America in areas below 6,000 feet (1,829 meters) in elevation.

#### **4.3.3.1 Survey Results**

SWWF typically occupy riparian natural communities. Riparian habitat is present in the BSA, which includes southern cottonwood-willow riparian forest. No SWWF were observed during the 2025 protocol surveys.

#### **4.3.3.2 Project Impacts**

Direct impacts to SWWF are not expected to occur as a result of the project because SWWF were not observed in the BSA and suitable habitat would not be impacted by the project. No habitat documented as being historically occupied by SWWF would be removed by the project. Indirect temporary effects to marginally suitable SWWF habitat may include increased dust during construction activities in proximity to riparian habitats and indirect temporary effects to SWWF may include increased noise and vibration during construction activities. With implementation of the avoidance and minimization measures below, the construction activities that will be performed over a short period of time, and the presence of existing dust, noise and vibration on a highly traveled portion of SR-74, the indirect impacts are expected to be minimal. Therefore, the effect determination for SWWF is No Effect.

#### **4.3.3.3 Avoidance and Minimization Measures**

Because SWWF typically occupy riparian-associated natural communities, avoidance and minimization efforts for sensitive natural communities are the same as those described in Section 4.1.1.3 (i.e., Avoidance and Minimization Measures BIO-1 through BIO-5) and Section 4.3.1.3 (i.e., Avoidance and Minimization Measure BIO-11). With successful implementation of these measures, impacts to SWWF would be avoided, and no additional avoidance or minimization measures are warranted.

No direct take of SWWF or designated critical habitat is expected; therefore, specific compensatory mitigation is not warranted. If SWWF are found during pre-construction surveys or project monitoring and work cannot be completed without avoiding take, Section 7 consultation with the USFWS would be required. While not anticipated, compensatory mitigation may be developed in consultation with the USFWS, if necessary.

#### **4.3.4 Discussion of Crotch's Bumble Bee**

Crotch's bumble bee was designated a candidate species for listing under the California Endangered Species Act on June 18, 2019, following a petition from the Xerces Society for Invertebrate Conservation, Defenders of Wildlife, and Center for Food Safety filed in October 2018. However, in the Sacramento Superior Court for Case No. 34-2019-80003216 (*Almond Alliance of California v. California Department of Fish and Wildlife*, Sacramento Superior Court, November 13, 2020), the Candidate listing was not deemed valid as it was noted that insects are not eligible for listing under CESA. Later in 2022, the Third Appellate Court District in California ruled that the bumble bee could be listed under the definition of fish, as the term fish was already broadly applied, inclusive of invertebrates. This reversed the 2020 ruling

and as such Crotch's bumble bee is now considered a candidate species for listing as threatened under CESA.

Crotch's bumble bee occurs primarily in California, including the Mediterranean region, the Pacific Coast, the Western Desert, and adjacent foothills throughout most of the State's southwestern region. This species inhabits grasslands and shrublands and requires a hotter and drier environment than other bumblebee species. Typical food sources include milkweed, lupines, sages, phacelias, clarkias, poppies, and wild buckwheat. Nests are often located underground in abandoned rodent nests, or above ground in tufts of grass, old bird nests, rock piles, or cavities in dead trees. Only mated queens overwinter and conduct all the foraging and care for the colony in early spring until the first workers emerge and assist with these duties.

#### **4.3.4.1 Survey Results**

Crotch's bumble bee was not observed in the BSA during the 2025 surveys conducted for this project, however, focused Crotch's bumble bee surveys were not conducted. Suitable foraging habitat that includes nectar sources for Crotch's bumble bee occurs in the CSS, riparian, and chaparral habitats within the BSA. The ruderal areas located along SR-74 within Caltrans ROW are regularly disturbed from ongoing and frequent maintenance (i.e., mowing to ground level) and would not provide suitable foraging or nectar source due to the ongoing disturbance associated with regular traffic.

#### **4.3.4.2 Project Impacts**

Construction activities are limited to the existing ROW adjacent to SR-74 within areas that are subject to regular disturbance. While direct impacts to Crotch's bumble bee are not expected as a result of the project, the project is anticipated to result in 0.02 acre of temporary impacts to CSS as a result of installation of drainage improvements. Temporary impacts will result in vegetation removal or grubbing, which may occur as a result of temporary construction areas needed to carry out the proposed construction activities. Indirect temporary impacts to marginally suitable Crotch's bumble bee habitat may include increased dust during construction activities, and indirect temporary impacts to Crotch's bumble bee may include increased noise and vibration during construction activities associated with the project. In addition, because those activities will be performed over a short period of time on highly traveled portions of SR-74, indirect impacts are expected to be minimal.

#### **4.3.4.3 Avoidance and Minimization Measures**

The following measures, along with those listed in Section 4.1.1.3 (i.e., Avoidance and Minimization Measures BIO-1 through BIO-5), are recommended to minimize potential impacts to Crotch's bumble bee from project construction. With successful implementation of these measures, impacts to Crotch's bumble bee would be avoided, and no additional avoidance or minimization measures are warranted.

#### 4.3.5 Discussion of Arroyo Toad

The arroyo toad (ARTO) was listed as federally endangered by the USFWS on December 16, 1994, and is considered a California Species of Special Concern. The ARTO breeds both within streams and in small backwater pools that form along the stream margins, usually in relatively shallow water (4 inches) (LSA 2017). ARTO breed and deposit egg masses in shallow, sandy pools, which are usually bordered by sand and gravel flood terraces. Adult and subadult ARTO seek shelter during the day and other periods of inactivity by burrowing into old flood channel terraces and often into the soils below the canopy of arroyo willow (*Salix lasiolepis*), cottonwoods (*Populus fremontii*), or coast live oak (*Quercus agrifolia*). ARTO move between the stream and upland foraging sites as well as up and down the stream corridor to find suitable breeding pools, spending much of their lives in riparian habitats adjacent to breeding locations. Outside of the breeding season, ARTO are essentially terrestrial and known to burrow in multiple types of upland habitat found in the BSA, such as sycamore riparian woodland, oak woodland, CSS, chaparral, and grasslands (Griffin 2001). They mostly use riparian habitats, sand bars, alluvial terraces, and streamside benches that lack vegetation or have low-to-moderate vegetative cover composed predominantly of California sycamore (*Platanus racemosa*), coast live oak, mule fat (*Baccharis* spp.), cottonwoods, and willow. They are known to move into upland habitats after completing individual breeding activity (Griffin 1999).

Studies have shown that most juvenile ARTO disperse away from their natal pools about a year after metamorphosis, and numerous subadult and adult ARTO within confined river systems have been observed moving upstream and downstream as much as 0.5 mile and over 0.6 mile in some cases (Sweet 1993). In these confined watersheds, ARTO also move away from the stream channel into terrace and upland native habitats. For example, “on lower Piru Creek, two adult males were observed under oaks that were 200 ft away from the stream channel” (Sweet 1992).

It should be noted that the proportion of suitable habitat may change during the year and from year to year, depending on climatic conditions, fires, other natural events (e.g., storms, floods), or human-related events. Indeed, “because habitat conditions are variable across space and time, it is difficult to estimate the exact distribution of ARTO or the extent of suitable habitat in any particular drainage system at a given time” (USFWS 2014).

Because ARTO have specialized breeding habitat requirements, the species is particularly vulnerable to habitat destruction and alteration due to short- and long-term changes in river hydrology, including construction of dams and water diversions. ARTO are also impacted by the alteration of riparian wetland habitats from agriculture and urbanization, construction of roads, site-specific damage by off-highway vehicle use and other recreational activities, overgrazing, and mining activities (USFWS 2014).

#### **4.3.5.1 Survey Results**

ARTO were not observed in the BSA during the 2025 general surveys conducted in the BSA; however, protocol ARTO surveys were not conducted as the timing constraints of the survey made it impossible to complete a full protocol survey for the species. Marginal riparian and upland habitat are present in most of the BSA, which includes southern cottonwood-willow riparian forest, coast live oak woodland, CSS, chaparral and nonnative grassland. However, portions of San Juan Creek, its riparian habitat, and adjacent upland areas within the BSA provide moderate to high quality riparian and upland habitat. No shallow pools that support breeding pools were observed within the BSA, although San Juan Creek contained running water at the time of the general surveys and portions of San Juan Creek's floodplain that occur within the BSA may provide these areas throughout the year. Overall, suitable habitat areas are present in the BSA.

Designated critical habitat, as well as additional suitable habitat for the ARTO is present in the BSA. There are approximately 43 acres of critical habitat located within the project disturbance limits. Of that critical habitat total, 26.85 acres are characterized as having an asphalt surface or other developed areas that do not contain the physical or biological features required for ARTO recovery.

#### **4.3.5.2 Project Impacts**

Construction activities are limited to the existing ROW adjacent to SR-74 within areas that are subject to regular disturbance. While direct impacts to ARTO are not expected as a result of the project because no construction work is proposed within San Juan Creek, the project is anticipated to temporarily impact 0.02 acre of CSS, 0.01 acre of temporary impacts to chaparral, and 0.01 acre of temporary impacts to coast live oak woodland habitat as a result of installation of drainage improvements, conduit, and guardrail upgrades. A total of 0.003 acre of designated ARTO critical habitat would be permanently impacted by the project, although these permanently impacted areas are characterized as ruderal that do not contain the physical or biological features required for ARTO recovery.

An additional 21.834 acres of ARTO critical habitat would be temporarily impacted by the project including 21.682 acres of developed area and 0.047 acre of ruderal area, both of which do not contain the physical or biological features required for ARTO recovery. A total of 0.010 acre of designated ARTO critical habitat temporarily impacted by project activities, including 0.002 acre of chaparral, 0.004 acre of CSS and 0.004 acre of coast live oak woodland will occur as a result of drainage improvements, conduit installation and guardrail upgrades. While these areas contain the physical or biological features and permanent impact area don't contain the physical or biological features for the recovery of the species, the project will have an insignificant effect to ARTO or their recovery because these impacts are small, are located adjacent to SR-74, and the maintained ruderal areas, and provide low value habitat for the species. Furthermore, sufficient habitat will remain to support essential breeding and foraging habitat outside the BSA. Due to temporary and permanent impacts to ARTO critical habitat areas, informal section 7 consultation with USFWS is required.

No potential breeding pool habitat was identified within the portions of ARTO critical habitat that would be affected by the Build Alternative.

Indirect temporary impacts to suitable ARTO habitat may include increased dust during construction activities and indirect temporary impacts to ARTO may include increased noise and vibration during construction associated with the project. In addition, because those activities will be performed over a short period of time on highly traveled portions of SR-74, indirect impacts are expected to be minimal.

#### **4.3.5.3 Avoidance and Minimization Measures**

In order to minimize any impacts to the ARTO and existing downstream breeding or critical habitat, Avoidance and Minimization Measures BIO-1, BIO-2, BIO-3, and the following measures will be incorporated into the project:

**BIO-12 Arroyo Toad Exclusionary Fencing.** All drainage, conduit (located within critical habitat area), and guardrail upgrade construction activity areas shall be limited to the impact boundaries by installing exclusionary fencing (i.e., silt fence or other suitable non-penetrable fencing) along the boundary to prevent construction from encroaching into adjacent areas and to exclude ARTO from the construction site.

**BIO-13 Arroyo Toad Biological Monitor.** A USFWS-approved Biologist permitted to handle ARTO shall monitor all construction activities listed above and located within and adjacent to suitable habitat. The ARTO monitoring shall occur weekly if construction activities occur outside the breeding season. If ARTO are found, the qualified Biologist may relocate them out of harm's way to reduce injury or mortality from equipment, foot traffic, or ground disturbance. Field notes and weekly memos will be provided to Caltrans detailing monitoring items and fence conditions.

**BIO-14 Worker Environmental Awareness Program.** Prior to construction, a qualified biologist shall provide a worker environmental awareness program (WEAP) for listed species that may be affected by the project. The program shall be presented to all personnel working on site during construction.

Any grading and removal of vegetation within temporary impacts to ARTO critical habitat will be replaced with native hydroseed plants.

#### **4.3.6 Discussion of Western Spadefoot Toad**

The western spadefoot toad (WST) was petitioned by the Center for Biological Diversity (CBD) to be listed as an endangered species or threatened species on July 11, 2012, and is considered a California Species of Special Concern (SSC). WST is endemic to California and northern Baja California. In California, its range extends from the Central Valley and the interior coast ranges south through the

Transverse and Peninsular Ranges to northwestern Baja California. Populations are increasingly fragmented due to urbanization, agriculture, and road development.

WST requires both aquatic and terrestrial habitats. Suitable habitat may include coastal and chaparral scrub, and mixed woodland and grassland that support seasonal aquatic features such as vernal pools, swales, or ephemeral ponds. Upland habitat must be present in proximity to breeding sites to support the species' life cycle. Breeding occurs in ephemeral pools or seasonal wetlands. However, eggs and larvae of WST have been observed in a variety of permanent and temporary wetlands, both natural and altered, including rivers, creeks, artificial ponds, livestock ponds, sedimentation and flood control ponds, irrigation and roadside ditches, roadside puddles, tire ruts, and borrow pits, indicating a degree of ecological plasticity (CNDDDB 2019).

Adults range from 3.8 to 6.3 cm (1.5–2.5 in) snout-vent length. They are typically gray to greenish-brown in color, with pale dorsal striping and orange or reddish-tipped tubercles. A distinguishing feature is the dark, keratinized spade on each hind foot, used for burrowing. WST are known to burrow underground to depths of approximately 1 m (3 ft) during dry periods to avoid desiccation and extreme temperatures. This species emerges in response to rainfall, typically between October and May, to breed and forage. Breeding occurs shortly after rainfall events in temporary pools. Eggs are laid in strings, and larvae develop rapidly to metamorphosis before the water dries. Juveniles and adults return to upland habitats, where they remain in burrows for most of the year.

#### **4.3.6.1 Survey Results**

WST was not observed in the BSA during the 2025 general and protocol surveys, however, focused WST protocol surveys were not conducted. WST typically occupy riparian and upland natural communities. Riparian and upland habitat is present in the BSA, which includes southern cottonwood-willow riparian forest, CSS, coast live oak woodland, chaparral and nonnative grassland.

Marginal riparian and upland habitat are present in most of the BSA, which includes southern cottonwood-willow riparian forest, coast live oak woodland, CSS, chaparral and nonnative grassland. However, San Juan Creek, its riparian habitat and adjacent upland areas provide moderate to high quality riparian and upland habitat. No ephemeral pools or seasonal wetlands that support breeding were observed within the BSA although San Juan Creek contained running water at the time of the general surveys and portions of San Juan Creek's floodplain that occur within the BSA may provide these areas throughout the year. Overall, suitable habitat areas are present in the BSA.

#### **4.3.6.2 Project Impacts**

Construction activities are limited to the existing ROW adjacent to SR-74 within areas that are subject to regular disturbance. While direct impacts to WST are not expected as a result of the project, the project is anticipated to have 0.01 acre of



temporary impacts to chaparral, 0.02 acre of temporary impacts to CSS, and 0.01 acre of temporary impacts to coast live oak woodland as a result of installation of drainage improvements, conduit and guardrail upgrades. While these areas contain the physical or biological features required for WST recovery they are small, located adjacent to SR-74 and maintained ruderal areas, provide low value habitat for the species and impacts within them are not anticipated to impact WST or their recovery.

Indirect temporary impacts to suitable WST habitat may include increased dust during construction activities and indirect temporary impacts to WST may include increased noise and vibration during construction associated with the project. In addition, because those activities will be performed over a short period of time on highly traveled portions of SR-74, indirect impacts are expected to be minimal.

#### **4.3.6.3 Avoidance and Minimization Measures**

In order to minimize any impacts to the WST breeding and aestivation habitat, Avoidance and Minimization Measures BIO-13 and BIO-14 will be incorporated into the project.

#### **4.3.7 Discussion of Mountain Lion**

In July 2019, the Center for Biological Diversity petitioned the California Fish and Game Commission (Commission) to list the Southern California/Central Coast Evolutionarily Significant Unit (ESU) of mountain lions as threatened under CESA. In April 2020, the Commission designated mountain lions within the ESU as a candidate species under CESA. The ESU generally occurs in the southwestern portion of the state. Orange County is located within the ESU.

Mountain lion is a large cat that is widespread but uncommon within Southern California. Home range sizes vary depending on season, sex, reproductive status, prey density, and geographic area. Males generally have much larger ranges than females and females with cubs tend to have even smaller ranges. Zeller et al. (2017) found that mountain lion home ranges in Southern California range from 15–192 square miles, with mean home range sizes of 73 square miles for females and 122 square miles for males (Zeller et al. 2017). It requires extensive areas of riparian vegetation and brushy stages of various habitats, with interspersions of irregular terrain, rocky outcrops, and tree/bush edges. Mountain lions are carnivores, and large ungulates, especially deer, are the preferred prey, although they are opportunistic predators that have been documented eating a variety of other large and small prey, including but not limited to, rabbits and hares, rodents, porcupines, skunks, bobcats, coyotes, and livestock.

##### **4.3.7.1 Survey Results**

Although mountain lion was not observed during field surveys, its sign in the form of footprints were observed during field surveys conducted between May and September 2025. The prints observed were located 33.573666, -117.541348 under

the SR-74 bridge within the San Juan creek. The prints observed were multiple tracks from what looked to be from one animal moving up stream. The footprints are not located within the three drains that are proposed to be modified.

It is unlikely mountain lions may den within undeveloped portions of the BSA due to the extensive and existing anthropogenic disturbances present.

#### **4.3.7.2 Project Impacts**

The project impact area is limited to the adjacent roadway and the project will result in no direct impacts to mountain lions since the project impact area is limited to the adjacent roadway and disturbed areas.

These impacts, including noise and visual impacts to wildlife movement, may indirectly impact wildlife movement in San Juan Creek and culverts utilized for wildlife movement but are expected to be minimal due to the presence of existing traffic on SR-74.

#### **4.3.7.3 Avoidance and Minimization Measures**

Because mountain lions generally occupy native natural communities, avoidance and minimization efforts are the same as those described in Section 4.1.1.3 for the CSS/riparian habitats (i.e., Avoidance and Minimization Measures BIO-1 through BIO-5). In addition, to address indirect impacts to wildlife crossings for mountain lions, the following Measures BIO-15 would be implemented.

**BIO-15 Construction Lighting and Staging.** Construction equipment maintenance, lighting, and staging must be in designated areas and away from wildlife undercrossings.

No direct take of mountain lion is expected; therefore, specific compensatory mitigation is not warranted. Active construction activities may temporarily deter wildlife movement due to the increased noise and human activity, but wildlife is expected to continue to use corridors such as San Juan Creek when construction work is not occurring, particularly at dawn and dusk. No permanent barriers would be placed within the project limits and implementation of the proposed project is not expected to permanently affect wildlife movement.

#### **4.3.8 Discussion of Bats**

Various regulations afford protections to bats, which are classified as indigenous non-game mammal species regardless of their status under both CESA and FESA. These regulations include Title 14, Section 251.1 of the California Code of Regulations (CCR), which prohibits harassment (defined in that section as an intentional act that disrupts an animal's normal behavior patterns, including breeding, feeding, or sheltering) of non-game mammals (e.g., bats), and California Fish and Game Code Section 4150, which prohibits "take" or possession of all non-game mammals or parts thereof. Any activities resulting in bat mortality (e.g., the destruction of an occupied bat roost that results in the death of bats), disturbance

that causes the loss of a maternity colony of bats (resulting in the death of young), or various modes of non-lethal pursuit or capture may be considered “take” as defined in Section 86 of the California Fish and Game Code by the CDFW.

Several bat species have the potential to occur within the BSA and are discussed in detail below.

#### **4.3.8.1 Survey Results**

No sign of roosting bats was observed during the general habitat suitability survey; however, bat-specific studies were not conducted in 2025. Based on the general habitat suitability survey, there is suitable foraging habitat for bats throughout the entire BSA, and structures (i.e., culverts) and trees that may provide suitable day and/or night roosting habitat for bats to be present.

Special-status bat species that have potential to roost within the BSA include those species identified as having habitat present, as shown in Table 4. This includes western mastiff bat (*Eumops perotis californicus*), western red bat (*Lasiurus blossevillei*), pallid bat (*Antrozous pallidus*), as well as non-special-status bat species such as Yuma myotis (*Myotis yumanensis*), California myotis (*Myotis californicus*), and big brown bat (*Eptesicus fuscus*).

#### **4.3.8.2 Project Impacts**

Bat-roosting habitat may be subject to the direct impacts from construction activities where any trees may need to be trimmed or removed. Crevice-roosting bat species may use crevices and/or cavities within a variety of trees for roosting, including maternity roosting colonies during the maternity season (April 1 – August 31). Tree roosting bat species may also roost within the foliage of trees including oaks and sycamores. Drainage improvements within the BSA are not anticipated to impact bat species due to the small diameter of the culverts being improved and lack of access to these culverts due to overgrown vegetation.

Potential indirect impacts (e.g., increases in ambient noise and localized noise) to bats roosting within vegetation adjacent to SR-74 are not expected because the activities will be performed over a short period of time on highly traveled portions of SR-74 that are subject to regular noise, vibration, and dust disturbance. Because of the existing uses that occur within the BSA, indirect impacts to bats are not anticipated. If project-related activities are to occur at night, indirect impacts from nighttime lighting could result in adverse effects to roosting and foraging bats. Nonetheless, the project includes measures to avoid adverse effects to roosting bats to the fullest practicable extent, as detailed in the section below.

#### **4.3.8.3 Avoidance and Minimization Measures**

The following avoidance and minimization measures are recommended to minimize potential impacts to night-roosting and foraging bats from project construction:

- BIO-16 Focused Daytime Bat Roosting Habitat Assessment.** Prior to any tree trimming or removal, a qualified bat biologist will conduct a focused daytime bat roosting habitat assessment to identify suitable bat roosting habitat within the trees.
- BIO-17 Focused Nighttime Acoustic and Emergence Survey.** If suitable bat roosting habitat for crevice/cavity maternity roosting bats is identified during the daytime bat roosting habitat assessment, a qualified bat biologist will conduct a maternity season focused nighttime acoustic and emergence survey at the locations where suitable bat roosting habitat for crevice/cavity maternity roosting bats has been identified. The survey(s) will occur from 30 minutes prior to sunset to 1 hour after sunset. Upon completion of the survey, if impacts to occupied habitat will occur, additional avoidance and minimization measures will be developed and implemented in the project. These measures shall consult *Caltrans Bat Mitigation: A Guide to Developing Feasible and Effective Solutions*.
- BIO-18 Preconstruction Bat Surveys.** A qualified bat biologist will conduct a preconstruction nighttime emergence survey within 3 days prior to the trimming of the tree. If the preconstruction survey and trimming occurs during the bat maternity season, and bats are observed emerging from the tree, then trimming will be postponed until either a nighttime survey confirms the absence of roosting bats or until the end of the maternity season. If the preconstruction survey and trimming occurs outside of the bat maternity season, and bats are observed emerging from the tree, the two-step tree removal process will be employed.
- BIO-19 Two-Step Tree Trimming/Removal.** Trees that have been identified as confirmed roost sites require a two-step removal process and the involvement of a qualified bat biologist to ensure that no roosting bats are killed during this activity. This two-step removal will take place over two consecutive days as follows: on Day 1, branches and limbs not containing cavities, as identified by a qualified bat biologist, will be removed using hand tools or chainsaws. The goal of this step is to create sufficient disturbance to cause any bats roosting in the tree to leave that night and not return, but not at a level of intensity that will cause bats to fly out of the tree during the disturbance itself (i.e., during the daytime, when leaving the roost could result in predation). On Day 2, the remainder of the limbs/tree may be removed and any crevices or cavities will be inspected for the presence of bats by the bat biologist before disposal.
- BIO-20 Night Work Lighting.** If night work (i.e. between dusk and dawn) is anticipated within 100 feet of where bat roosting is confirmed, night lighting shall be used only in areas of active work and shall be focused

on the direct area(s) of work and away from the roosting areas to the greatest extent practicable.

With implementation of the avoidance and minimization measures identified above, the potential for adverse effects to special-status bat species and bat colonies will be reduced to the greatest extent feasible. Compensatory mitigation would only be required, based on consultation with CDFW, if a maternity roost or large day roost develops and would be impacted by the project. The avoidance and minimization measures listed above are considered sufficient at this time based on the results of surveys.

#### **4.3.9 Discussion of Other Non-Listed Special-Status Animal Species and Nesting Birds (Class Aves)**

Although not observed during the field survey, there is at least a moderate potential for the following non-listed special-status species to occur within portions of the BSA—except for the yellow warbler, a non-listed CNDDDB Species of Special Concern, which was observed during the 2025 field surveys. (See Table 4 for a discussion of suitable habitat for each species.)

- Arroyo chub
- Coast horned lizard
- Coastal western whiptail
- Cooper's hawk (*Accipiter cooperii*)
- Red diamond rattlesnake (*Crotalus ruber*)
- Southern California legless lizard
- Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)
- White-tailed kite (*Elanus leucurus*)
- Yellow-breasted chat (*Icteria virens*)
- Yellow warbler (*Setophagia petechia*)

With the exception of white-tailed kite, these species are designated as California Species of Special Concern or California Special Animals (refer to Table 4). White-tailed kite is a California Fully Protected Species, which means it may not be taken or possessed at any time, and no licenses or permits may be issued for take except for certain limited circumstances, such as scientific research.

There is very low potential for most of these special-status animal species to be directly impacted by the construction of the project given the limited work and access proposed near suitable habitat areas.

The vegetation communities within the BSA provide suitable nesting habitat for a wide variety of bird species, including raptors. The California Fish and Game Code includes provisions for the protection of nesting birds and raptors, as does the federal Migratory Bird Treaty Act (MBTA).

#### **4.3.9.1 Survey Results**

Potentially suitable habitat for arroyo chub is present within the BSA due to San Juan creek being within proximity to the project. However, this species was not observed during the 2025 field surveys.

The BSA contains suitable habitat for coast horned lizard, coastal western whiptail, red diamond rattlesnake, and southern California legless lizard, as the area primarily consists of scrub and grassland, with some patches of woodland.

Coast horned lizard, coastal western whiptail, red diamond rattlesnake, and southern California legless lizard were not observed during the 2025 surveys. Nonetheless, suitable habitat exists within and near the BSA for all of these species.

Suitable nesting habitat for white-tailed kite and Cooper's hawk is present within portions of the BSA that support ornamental trees in proximity to urban development and areas that support native trees and vegetation (refer to Figure 3). White-tailed kite and Cooper's hawk may also forage over chaparral, CSS, ruderal grassland, and riparian habitats as well as residential areas.

The Southern California rufous-crowned sparrow, white-tailed kite, Cooper's hawk, and yellow-breasted chat were not observed during the 2025 surveys. However, yellow warbler was detected. Nonetheless, suitable nesting and foraging habitat exists within and near the BSA for all of these species.

In total, 62 bird species protected under the MBTA and California Fish and Game Code were observed in the BSA during the field surveys (see Appendix C), and many of these species have potential to nest in the BSA. Some species utilize ornamental vegetation or could even nest on structures within the BSA (e.g., nests atop streetlights).

#### **4.3.9.2 Project Impacts**

Construction activities are limited to the existing ROW adjacent to SR-74 within areas that are subject to regular disturbance. While direct impacts to these species are not expected as a result of the project, the project is anticipated to have 0.01 acre of temporary impacts to chaparral, 0.02 acre of temporary impacts to CSS, and 0.01 acre of temporary impacts to coast live oak woodland as a result of installation of drainage improvements.

Indirect temporary effects to suitable habitats may include increased noise, vibration, and dust, during project activities. Indirect impacts would be avoided or minimized through implementation of project avoidance and minimization features, which include best management practices (BMPs), Measure BIO-1 through 5, and BIO-11 to avoid indirect disturbance to nearby habitats. The project is not anticipated to have any adverse effects on special-status animal species.

The project is not anticipated to have any adverse effects on non-listed special-status animal species.

#### **4.3.9.3 Avoidance and Minimization Measures**

To avoid impacts to non-listed special-status animal species and minimize impacts to suitable habitat areas, Avoidance and Minimization Measures BIO-1 through BIO-5 (detailed in Section 4.1.1.3) and Measure BIO-11 (detailed in Section 4.3.1.3) would be implemented. With successful implementation of the avoidance and minimization measures described, impacts to non-listed special-status animals would be avoided, and no compensatory mitigation for non-listed special-status animal species is warranted. No additional avoidance or minimization measures are warranted.

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## 5. Conclusions and Regulatory Determinations

### 5.1 Federal Endangered Species Act Consultation Summary

Under the provisions of Section 7(a)(2) of the federal Endangered Species Act (FESA), a federal agency that permits, licenses, funds, or otherwise authorizes a project activity must consult with the USFWS and/or the National Marine Fisheries Service (NMFS) to ensure its actions would not jeopardize the continued existence of any listed species or destroy or adversely modify critical habitat. This NES(MI) provides details on the proposed project's impacts to federally listed plant and wildlife species. A federal Section 7 consultation between the California Department of Transportation (Caltrans) and the United States Fish and Wildlife Service (USFWS) is expected to be required because the Project is anticipated May affect but not adversely affect designated critical habitat area for Arroyo Toad.

Official species lists were received from the USFWS and the NOAA on September 8, 2025 (Appendix B). There is designated critical habitat for ARTO within the Biological Study Area (BSA). Effects determinations for each species are shown in Table 8. Forty-six federally-listed species including: Munz's onion (*Allium munzii*), San Diego ambrosia (*Ambrosia pumila*), Braunton's milk-vetch (*Astragalus brauntonii*), Encinitas baccharis (*Baccharis vanessae*), Nevin's barberry (*Berberis nevinii*), thread-leaved brodiaea (*Brodiaea filifolia*), slender-horned spineflower (*Dodecahema leptoceras*), Laguna Beach dudleya (*Dudleya stolonifera*), big-leaved crown-beard (*Verbesina dissita*), San Diego fairy shrimp (*Branchinecta sandiegonensis*), monarch butterfly (*Danaus plexippus*), quino checkerspot butterfly (*Euphydryas editha quino*), black abalone (*Haliotis cracherodii*), white abalone (*Haliotis sorenseni*), Riverside fairy shrimp (*Streptocephalus woottoni*), arroyo toad (*Anaxyrus californicus*), arroyo toad critical habitat, western spadefoot (*Spea hammondi*), southwestern pond turtle (*Actinemys pallida*), north Pacific loggerhead sea turtle (*Caretta caretta*), green sea turtle (*Chelonia mydas*), leatherback sea turtle (*Dermochelys coriacea*), olive ridley sea turtle (*Lepidochelyx olivacea*), green sturgeon sDPS (*Acipenser medirostris*), tidewater goby (*Eucyclogobius newberryi*), southern California steelhead DPS (*Oncorhynchus mykiss irideus*), western snowy plover (*Charadrius nivosus nivosus*), southwestern willow flycatcher (*Empidonax traillii extimus*), coastal California gnatcatcher (*Poliophtila californica californica*), California least tern (*Sterna antillarum browni*), least Bell's vireo (*Vireo bellii pusillus*), Stephens' kangaroo rat (*Dipodomys stephensi*), pacific pocket mouse (*Perognathus longimembris pacificus*), guadalupe fur seal (*Arctocephalus townsendi*), sei whale (*Balaenoptera borealis*), blue whale (*Balaenoptera musculus*), fin whale (*Balaenoptera physalus*), north Pacific right whale (*Eubalaena japonica*), humpback whale (*Megaptera novaeangliae*), killer whale (*Orcinus orca*), and sperm whale (*Physeter macrocephalus*) have been assigned A No Effect determination due to lack of suitable habitat. Coastal California gnatcatcher, arroyo toad, western spadefoot, southwestern willow flycatcher and least Bell's vireo have potentially suitable habitat within the BSA and are each discussed above in Section 4.3. With the implementation of avoidance and minimization measures, the project will have No Effect on the species identified above. However, due to temporary and permanent impacts to ARTO critical habitat areas, a may affect but not likely adversely affect determination is made for ARTO designated critical habitat.

**Table 8: Effects Determination for Species Identified by the Federal Species Lists**

Scientific Name	Common Name	Status		General Habitat Description	Effects Determination
		USFWS	CDFW		
MAMMALS					
<i>Arctocephalus townsendi</i>	Guadalupe fur seal	FT	ST/CFP	Marine intertidal and splash zone communities, protected deepwater coastal communities. Breeds on Isla de Guadalupe off of Mexico and is occasionally found on San Miguel, San Nicolas, and San Clemente Islands. Prefers shallow, nearshore island water, with cool and sheltered rocky areas for haul-outs.	No Effect
<i>Balaenoptera borealis</i>	Sei whale	FE	–	Has a wide distribution and lives in subtropical, temperate, and subpolar waters around the world. Prefers temperate waters in the mid-latitudes and can be found in the Atlantic, Indian, and Pacific oceans.	No Effect
<i>Balaenoptera musculus</i>	Blue whale	FE	–	Found in all oceans except the Arctic. Along the West Coast of the United States, eastern North Pacific blue whales are believed to spend winters off of Mexico and Central America. They likely feed during summer off the United States West Coast and, to a lesser extent, in the Gulf of Alaska and central North Pacific waters.	No Effect
<i>Balaenoptera physalus</i>	Fin whale	FE	–	Typically found in deep, offshore waters of all major oceans, primarily in temperate to polar latitudes.	No Effect
<i>Dipodomys stephensi</i>	Stephens' kangaroo rat	FT	ST	Found in plant communities transitional between grassland and coastal sage scrub, with perennial vegetation cover of less than 50%. Most commonly associated with <i>Artemisia tridentata</i> , <i>Eriogonum fasciculatum</i> , and <i>Erodium</i> . Requires well-drained soils with compaction characteristics suitable for burrow construction (neither sandy nor too hard). Not found in soils that are highly rocky or sandy,	No Effect

**Table 8: Effects Determination for Species Identified by the Federal Species Lists**

Scientific Name	Common Name	Status		General Habitat Description	Effects Determination
		USFWS	CDFW		
				less than 20 inches deep, or heavily alkaline or clay, or in areas exceeding 25% slope. Occurs only in western Riverside County, northern San Diego County, and extreme southern San Bernardino County, below 915 meters (3,000 feet) elevation. In northwestern Riverside County, known only from east of I-15. Reaches its northwest limit in south Norco, southeast Riverside, and in the Reche Canyon area of Riverside and extreme southern San Bernardino Counties.	
<i>Eubalaena japonica</i>	North Pacific right whale	FE	–	Has occurred historically in all the world's oceans from temperate to subpolar latitudes. Contemporary sightings of right whales have mostly occurred in the central North Pacific and Bering Sea. Sightings have been reported as far south as central Baja California in the eastern North Pacific, as far south as Hawaii in the central North Pacific, and as far north as the sub-Arctic waters of the Bering Sea and sea of Okhotsk in the summer.	No Effect
<i>Megaptera novaeangliae</i>	Humpback whale	FE	–	Lives throughout the world's major oceans. The Mexico population, which breeds along the Pacific coast of Mexico and the Revillagigedo Islands, transits the Baja California peninsula, and feeds across a broad range from California to the Aleutian Islands, Alaska.	No Effect
<i>Orcinus orca</i>	Killer whale (southern resident)	FE	–	Found in all oceans. While they are most abundant in colder waters like Antarctica, Norway, and Alaska, they are also found in tropical and subtropical waters. Resident killer whales have been seen from California to Russia. They are not, however, exclusively	No Effect

**Table 8: Effects Determination for Species Identified by the Federal Species Lists**

Scientific Name	Common Name	Status		General Habitat Description	Effects Determination
		USFWS	CDFW		
				"offshore," as they are sometimes seen in coastal nearshore waters.	
<i>Perognathus longimembris pacificus</i>	Pacific pocket mouse	FE	SSC	Historically occupied open habitats on sandy soils along the coast from Los Angeles to the Mexican border.	No Effect
<i>Physeter macrocephalus</i>	Sperm whale	FE	–	Inhabits all of the world's oceans.	No Effect
<b>BIRDS</b>					
<i>Charadrius nivosus nivosus</i>	Western snowy plover	FT	SSC	Sandy coastal beaches, lakes, alkaline playas. Scattered locations along coastal California and Channel Islands, inland at Salton Sea, and at various alkaline lakes.	No Effect
<i>Empidonax traillii eximius</i>	Southwestern willow flycatcher	FE	SE	Rare and local breeder in extensive riparian areas of dense willows or (rarely) tamarisk, usually with standing water, in the southwestern U.S. and possibly extreme northwestern Mexico. Winters in Central and South America. Below 6,000 feet (1,829 meters) in elevation.	No Effect
<i>Poliioptila californica californica</i>	Coastal California gnatcatcher	FT	SSC	Inhabits coastal sage scrub in low-lying foothills and valleys up to about 1,640 feet (500 meters) in elevation in cismontane southwestern California and Baja California.	No Effect
<i>Sterna antillarum browni</i>	California least tern	FE	SE/CFP	Nests along the coast from San Francisco Bay south to northern Baja California. Forages in shallow water. Colonial breeder on bare or sparsely vegetated, flat substrates, sand beaches, alkali flats, landfills, or paved areas.	No Effect
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE	SE	Riparian forests and willow thickets. The most critical structural component of least Bell's vireo habitat in California is a dense shrub layer 2 to 10 feet aboveground.	No Effect.

**Table 8: Effects Determination for Species Identified by the Federal Species Lists**

Scientific Name	Common Name	Status		General Habitat Description	Effects Determination
		USFWS	CDFW		
FISH					
<i>Acipenser medirostris</i>	Green sturgeon sDPS	FT	SA	Federal listing includes all spawning populations south of the Eel River.	No Effect
<i>Eucyclogobius newberryi</i>	Tidewater goby	FE	SSC	Brackish water habitats along the California coast from Agua Hedionda Lagoon (San Diego County) to the mouth of the Smith River (Del Norte County). Found in shallow lagoons and lower stream reaches.	No Effect
<i>Oncorhynchus mykiss irideus</i>	Southern California steelhead DPS	FE	SA	Federal listing refers to runs in coastal basins from the Pajaro River south to but not including the Santa Maria River.	No Effect
REPTILES					
<i>Actinemys pallida</i>	southwestern pond turtle	FC	SSC	Inhabits permanent or nearly permanent water. Absent from desert regions, except in the Mojave Desert along the Mojave River and its tributaries. Requires basking sites such as partially submerged logs, rocks, or open mud banks.	No Effect
<i>Caretta caretta</i>	North Pacific loggerhead sea turtle	FE	–	Loggerhead turtles are found worldwide, primarily in subtropical and temperate regions of the Atlantic, Pacific, and Indian Oceans, and in the Mediterranean Sea. In the Atlantic, the loggerhead turtle's range extends from Newfoundland to Argentina. In the eastern Pacific, loggerheads have been reported from Alaska to Chile.	No Effect
<i>Chelonia mydas</i>	Green sea turtle	FT	–	Marine; completely herbivorous; needs adequate supply of seagrasses and algae.	No Effect
<i>Dermochelys coriacea</i>	Leatherback sea turtle	FE	–	Occurs in the Atlantic, Pacific, and Indian oceans. Nesting beaches are primarily located in tropical latitudes around the world. Western Pacific leatherbacks feed off the Pacific coast of North America and migrate across the	No Effect

**Table 8: Effects Determination for Species Identified by the Federal Species Lists**

Scientific Name	Common Name	Status		General Habitat Description	Effects Determination
		USFWS	CDFW		
				Pacific to nest in Indonesia, Papua New Guinea, and the Solomon Islands.	
<i>Lepidocheylex oxivacea</i>	Olive ridley sea turtle	FT	–	Mainly a pelagic (open ocean) sea turtle, observed by trans-Pacific ships over 2,400 miles from shore, but they are also known to inhabit coastal areas.	No Effect
<b>AMPHIBIANS</b>					
<i>Anaxyrus californicus</i>	Arroyo toad	FE	SSC	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc. Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	No Effect.
<i>Anaxyrus californicus</i>	Arroyo toad (critical habitat)	Final Designated	N/A	Two critical habitat polygons occur in the BSA along the SR-74.	May Affect, Not Likely To Adversely Affect
<i>Spea hammondi</i>	Western spadefoot	PE	SSC	Grasslands and occasionally hardwood woodlands; largely terrestrial but requires rain pools or other ponded water persisting at least 3 weeks for breeding; burrows in loose soils during dry season. Occurs in the Central Valley and adjacent foothills, the non-desert areas of southern California, and Baja California.	No Effect.
<b>INVERTEBRATES</b>					
<i>Branchinecta sandiegonensis</i>	San Diego fairy shrimp	FE	SA	Small, shallow (usually less than 30 centimeters deep), relatively clear but unpredictable vernal pools on coastal terraces. Pools must retain water for a minimum of 13 days for this species to reproduce (3 to 8 days for hatching, and 10 to 20 days to reach reproductive maturity). Known from Orange and San Diego Counties, and Baja California.	No Effect

**Table 8: Effects Determination for Species Identified by the Federal Species Lists**

Scientific Name	Common Name	Status		General Habitat Description	Effects Determination
		USFWS	CDFW		
<i>Danaus plexippus</i> (wintering sites)	Monarch – California overwintering population	FPT	SA	Winter roosts are located in wind-protected tree groves (e.g., eucalyptus, Monterey pine, cypress) with nectar and water sources nearby.	No Effect
<i>Euphydryas editha quino</i>	Quino checkerspot butterfly	FE	SA	Meadows or openings within coastal sage scrub or chaparral below about 5,000 feet where food plants ( <i>Plantago erecta</i> and/or <i>Orthocarpus purpurascens</i> ) are present. Historically known from Santa Monica Mountains to northwest Baja California; currently known only from southwestern Riverside County, southern San Diego County, and northern Baja California.	No Effect
<i>Haliotis cracherodii</i>	Black abalone	FE	–	Marine intertidal and splash zone communities. Mid to low rocky intertidal areas.	No Effect
<i>Haliotis sorenseni</i>	White abalone	FE	–	Marine intertidal and splash zone communities. Rocky pinnacles and deep reefs in Southern California, especially those off the Channel Islands. Live at depths of at least 24 meters (80 feet) to over 61 meters (200 feet).	No Effect
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE	SA	Endemic to Western Riverside, Orange, and San Diego Counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.	No Effect

**Table 8: Effects Determination for Species Identified by the Federal Species Lists**

Scientific Name	Common Name	Status		General Habitat Description	Effects Determination
		USFWS	CDFW		
FLOWERING PLANTS					
<i>Allium munzii</i>	Munz’s onion	FE	ST	Seasonally moist sites on clay soils (generally) or within rocky outcrops (pyroxenite) on rocky-sandy loams (such as Cajalco, Las Posas, and Vallecitos) with clay subsoils, in openings within coastal sage scrub, pinyon juniper woodland, and grassland, at 300 to 1,070 meters (1,000 to 3,500 feet) elevation. Known only from western Riverside County in the greater Perris Basin (Temescal Canyon-Gavilan Hills/Plateau, Murrieta-Hot Springs areas) and within the Elsinore Peak (Santa Ana Mountains) and Domenigoni Hills regions.	No Effect
<i>Ambrosia pumila</i>	San Diego ambrosia	FE	–	Open, seasonally wet, generally low areas in floodplains or at edges of vernal pools or playas, usually in sandy loam or on clay (including upland clay slopes), at 20 to 487 meters (70 to 1,600 feet) elevation. Known from western Riverside and western San Diego Counties. Also occurs in Mexico.	No Effect
<i>Astragalus brauntonii</i>	Braunton's milk-vetch	FE	–	Considered a limestone endemic and dependent on fire. Usually on sandstone with carbonate layers following fire but may follow other disturbance and occur on stiff gravelly clay soils over granite. Typically associated with the fire-dependent chaparral habitat on limestone and on down-wash sites. From 12 to 1,920 feet (3 to 585 meters) in elevation.	No Effect
<i>Baccharis vanessae</i>	Encinitas baccharis	FT	SE	In chaparral, generally on sandstone soils in steep, open, rocky areas (north-facing outcrops, cliffs) at 60 to 720 meters (200 to 2,400 feet) elevation. Known only from San Diego County, California.	No Effect



**Table 8: Effects Determination for Species Identified by the Federal Species Lists**

Scientific Name	Common Name	Status		General Habitat Description	Effects Determination
		USFWS	CDFW		
<i>Berberis nevinii</i>	Nevin's barberry	FE	SE	Gravelly wash margins in alluvial scrub or coarse soils and rocky slopes in chaparral at 70 to 825 meters (220 to 2,700 feet) elevation. Known occurrences at higher elevations are planted (not natural). Known only from Los Angeles, San Bernardino, Riverside, and San Diego Counties, California.	No Effect
<i>Brodiaea filifolia</i>	Thread-leaved brodiaea	FT	SE	Perennial bulbiferous herb. Occurs in chaparral (opening), cismontane woodland, coastal scrub, playas, vernal pools, and valley and foothill grasslands from 80 to 3,675 feet (24 to 1,120 meters) in elevation.	No Effect
<i>Dodecahema leptoceras</i>	Slender-horned spineflower	FE	SE	In the Vail Lake area, occurs in gravel soils of Temecula arkose deposits in openings in chamise chaparral. In other areas, occurs in sandy cobbly riverbed alluvium in alluvial fan sage scrub (usually late seral stage), on floodplain terraces and benches that receive infrequent overbank deposits from generally large washes or rivers, where it is most often found in shallow silty depressions dominated by leather spineflower ( <i>Lastarriaea coriacea</i> ) and other native annual species, and is often associated with cryptogamic soil crusts composed of bryophytes, algae and/or lichens. Occurs at 200 to 760 meters (600 to 2,500 feet) elevation. Known only from Los Angeles, Riverside, and San Bernardino Counties, California.	No Effect

**Table 8: Effects Determination for Species Identified by the Federal Species Lists**

Scientific Name	Common Name	Status		General Habitat Description	Effects Determination
		USFWS	CDFW		
<i>Dudleya stolonifera</i>	Laguna Beach dudleya (liveforever)	FT	ST	Perennial stoloniferous herb. Occurs in chaparral, cismontane woodland, coastal scrub, and valley and foothill grasslands, often in thin soil on north-facing sandstone cliffs, from 30 to 780 feet (9 to 238 meters) in elevation.	No Effect
<i>Verbesina dissita</i>	Big-leaved crown-beard	FT	ST	Steep, rocky, primarily north-facing slopes in maritime chaparral at 45 to 210 meters (150 to 700 feet) elevation within 1.5 miles of the ocean, and rarely in coastal sage scrub near the bottoms of south-facing slopes opposite north-facing slopes of maritime chaparral. Known only from Orange County in central and southern areas of Laguna Beach, and from Baja California.	No Effect

Source 1: Information for Planning and Consultation (IPaC) (USFWS 2025a).

Source 2: National Oceanic and Atmospheric Administration (NOAA). 2025. Website: [https://archive.fisheries.noaa.gov/wcr/maps\\_data/california\\_species\\_list\\_tools.html](https://archive.fisheries.noaa.gov/wcr/maps_data/california_species_list_tools.html) (accessed August 2025).

BSA = Biological Study Area

CDFW = California Department of Fish and Wildlife

CFP = California Fully Protected Species

DPS = distinct population segment

FC = Federal Candidate

FE = Federally Endangered

ft = foot/feet

FT = Federally Threatened

FPT = Federally Proposed Threatened

I-15 = Interstate 15

N/A = not applicable

PE = Federally Proposed Endangered

SA = California Special Animal

sDPS = southern distinct population segment

SE = State Endangered

SR-74 = State Route 74

SSC = State Species of Concern

ST = State Threatened

U.S. = United States

USFWS = United States Fish and Wildlife Service

## **5.2 Federal Fisheries and Essential Fish Habitat Consultation Summary**

No federal fisheries or essential fish habitat are located within the BSA. No anadromous fish are expected to occur in the BSA; therefore, no FESA Section 7 consultation related to federal fisheries or essential fish habitat will be required.

## **5.3 California Endangered Species Act Consultation Summary**

The California Endangered Species Act (CESA) protects plant and animal species that are listed as rare, threatened, or endangered. The California Department of Fish and Wildlife (CDFW) authorizes take of endangered, threatened, or candidate species through the provisions of Sections 2081 and 2080.1 of the California Fish and Game Code (see Table 8). Authorization from the CDFW (under Sections 2081 or 2080.1 of the California Fish and Game Code) for take of any Endangered, Threatened, or Candidate species is not expected to be required because take of State-listed species is not expected. With implementation of the avoidance and minimization measures described in this NES(MI), the proposed project would avoid impacts and direct take of CESA-listed species. If CESA-listed species are found during pre-construction surveys or unavoidable impact to CESA-listed species occurs during construction, consultation with the CDFW will be initiated and additional measures will be developed.

## **5.4 Wetlands and Other Waters Coordination Summary**

A Jurisdictional Delineation (JD) was conducted in May through September 2025 for the Project (Appendix D). The JD was conducted to determine the potential for federal and State jurisdictional waters and wetland resources. The Jurisdictional Delineation Study Area (JDSA) contains potential jurisdictional waters, including limited wetlands, within the BSA. The findings and conclusions regarding the location and extent of wetlands and other waters subject to regulatory jurisdiction (or lack thereof) presented in this NES(MI) represent the professional opinion of LSA. These findings and conclusions should be considered preliminary until verified by the United States Army Corps of Engineers (USACE), CDFW, and Regional Water Quality Control Board (RWQCB).

Under the proposed project approach, equipment access and direct impacts to non-wetland waters would be required. To summarize, the following impacts to other waters are anticipated (see Section 4.1.5 for details):

- 0.001 acre of temporary impacts to non-wetland waters WOTS; and
- 0.001 acre of temporary impacts to CDFW streambed.

Therefore, the proposed project is anticipated to require jurisdictional authorizations or permits from the RWQCB and CDFW. Compensatory mitigation will be not be required as permanent impacts are not proposed to jurisdictional waters. Restoration of temporary impacts to jurisdictional aquatic resources will be required. In addition,

avoidance and minimization measures described in Section 4.1.5.3 would be implemented to avoid and minimize additional potential direct and indirect impacts to jurisdictional aquatic resources during construction activities.

## **5.5 Invasive Species**

Nonnative plant species occur within the plant communities along the road shoulder and other disturbed areas within the BSA, largely in areas that have been disturbed by human uses. There were 89 nonnative plants occurring on the California Invasive Plant Council (Cal-IPC) California Invasive Plant Inventory identified in the BSA. Invasive species that have substantial ecological effects are given a moderate or high rating. A total of 44 invasive plant species with a moderate or high Cal-IPC rating were identified in the BSA.

The project has limited potential to spread invasive species to native habitats because construction equipment will be primarily restricted to ornamentally planted areas or disturbed, barren, or developed sites within the BSA, although minor impacts to vegetation communities are proposed.

In compliance with Executive Order (EO) 13112, standard best practices will be implemented to minimize the importation of nonnative plant material during and after construction. Eradication strategies would be employed should an invasion occur. All construction equipment accessing unpaved areas will be cleaned with water to remove dirt, seeds, vegetative material, or other debris that could contain or hold seeds of noxious weeds before arriving to and leaving the project sites. Only certified weed-free straw, mulch, and/or fiber rolls will be used for erosion control. Invasive species will not be used in any landscaping palettes for the project.

## **5.6 Other**

### **5.6.1 Wildlife Movement**

Movement of wildlife species such as mountain lion, bobcats, and coyotes is expected within the BSA, particularly in the riparian habitats and wildlife undercrossings. The project area is within and adjacent to the Ronald W. Caspers Wilderness Park. Active construction activities may temporarily deter wildlife movement due to increased noise and human activity in adjacent areas, but wildlife is expected to continue to use corridors when construction work is not occurring, particularly at dawn and dusk. Project work would take place in relatively disturbed areas alongside a busy highway. No permanent barriers would be placed within any known wildlife movement corridors. As such, implementation of the proposed project is not expected to permanently affect wildlife movement or decrease the functionality of any wildlife crossings; therefore, there would be no project-specific mitigation required.

## **5.6.2 Migratory Bird Treaty Act and CDFW Nesting Bird Regulations**

Potential effects to nesting raptors, special-status birds, and other migratory bird species may occur during the bird breeding season. The typical breeding season is from February 15 through September 30. Direct impacts to suitable habitat for nesting birds are expected to occur because the project will remove or trim trees and other undeveloped areas of the BSA. In addition, potential indirect impacts include increased noise, dust, and vibration in close proximity to suitable nesting locations.

### **5.6.2.1 Avoidance and Minimization Efforts**

To avoid potential effects to fully protected raptors, special-status bird species, and other nesting birds protected by the MBTA and the California Fish and Game Code, Measure BIO-12 (discussed under Section 4.3.1.3) will be implemented.

## **5.6.3 Anadromous Fish Passage**

Caltrans is required by Senate Bill (SB) 857 to construct projects without presenting barriers to fish passage or to remediate existing barriers. No anadromous fish streams are present within the BSA, and the project does not include the installation of barriers that could impact fish passage. Therefore, the project will not impact anadromous fish or their passage.

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## **Appendix A: Figures**

Figure 1: Regional and Project Location (4 sheets)

Figure 2: Proposed Project Components (13 sheets)

Figure 3: Vegetation and Land Cover (13 sheets)

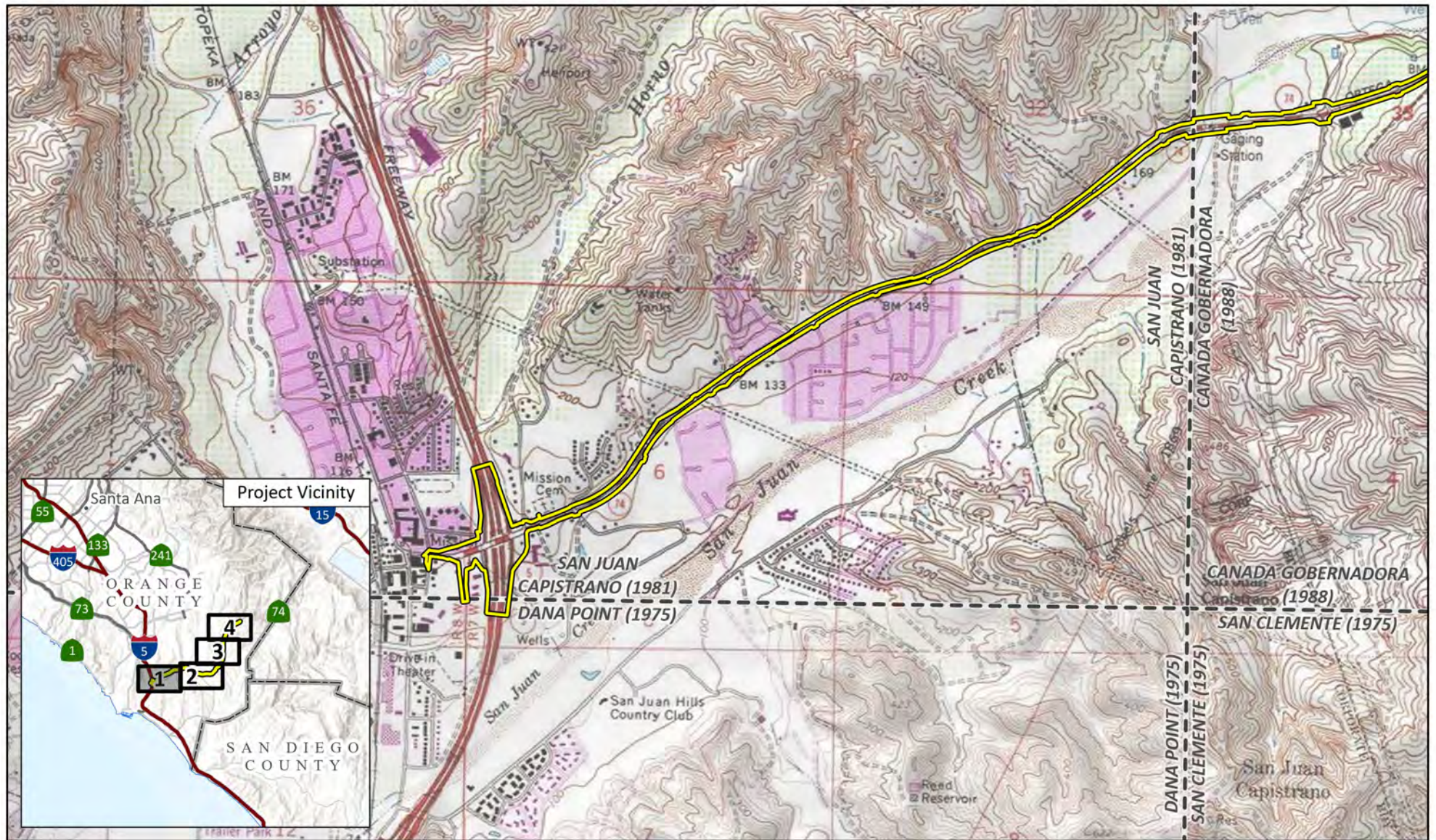
Figure 4: Jurisdictional Areas (24 sheets)

Figure 5: Impacts to Vegetation and Land Cover Types (39 sheets)

Figure 6: Impacts to Jurisdictional Areas (1 sheet)

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Project Site

FIGURE 1  
Sheet 1 of 4



0 1000 2000  
FEET

SOURCE: USGS 7.5' Quad - San Juan Capistrano, CA (1975), Dana Point, CA (1975), Canada Gobernadora, CA (1988), San Clemente, CA (1975)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (9/25/2025)

SR-74 Multi-Asset Management

Project Location

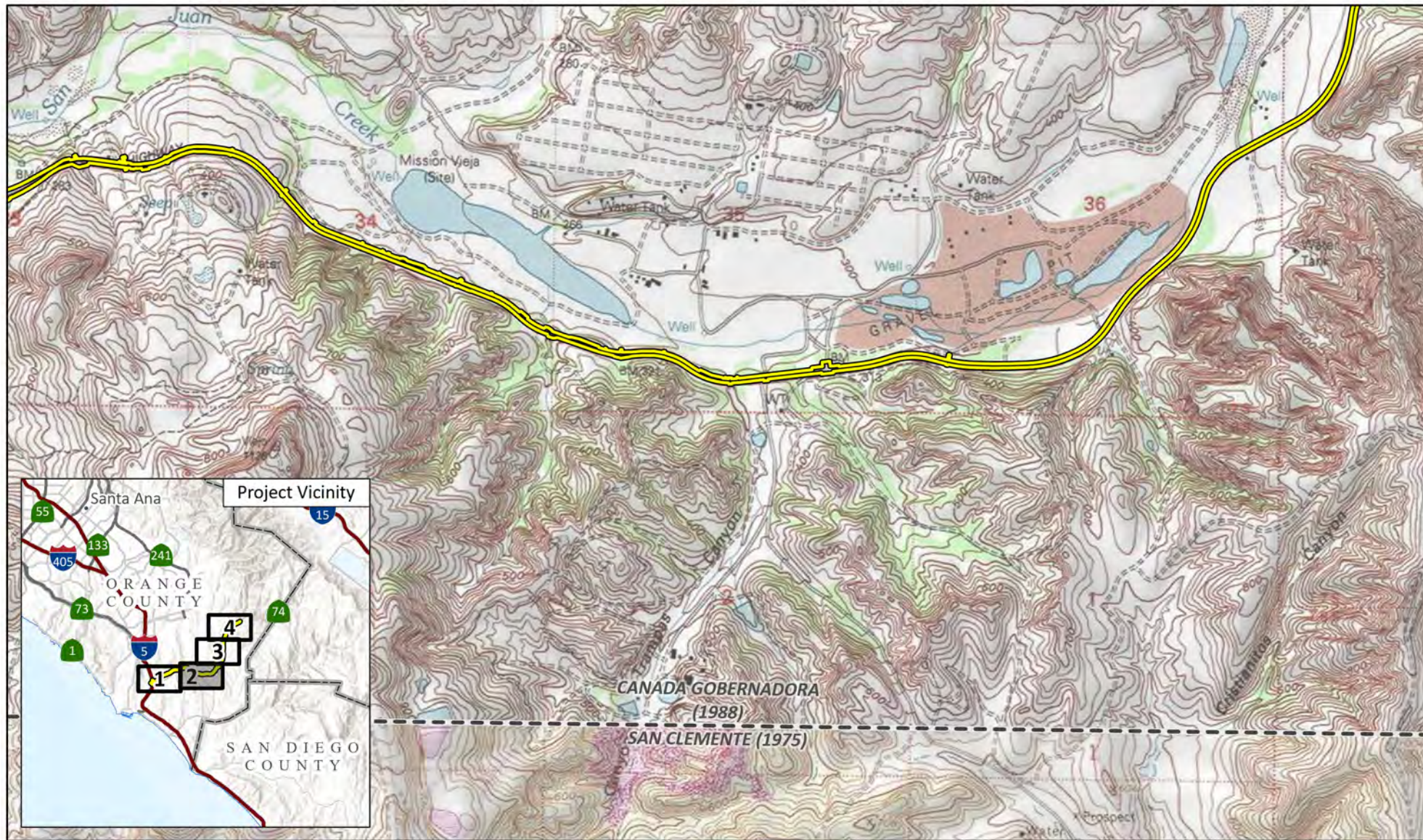
12-ORA-SR7473 - PM 0.0-11.5

EA 0R990 1219000072



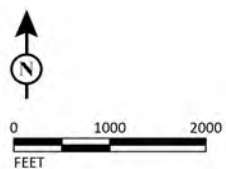
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Project Site

FIGURE 1  
Sheet 2 of 4



SOURCE: USGS 7.5' Quad - Canada Gobernadora, CA (1988), San Clemente, CA (1975)

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SR-74 Multi-Asset Management

Project Location

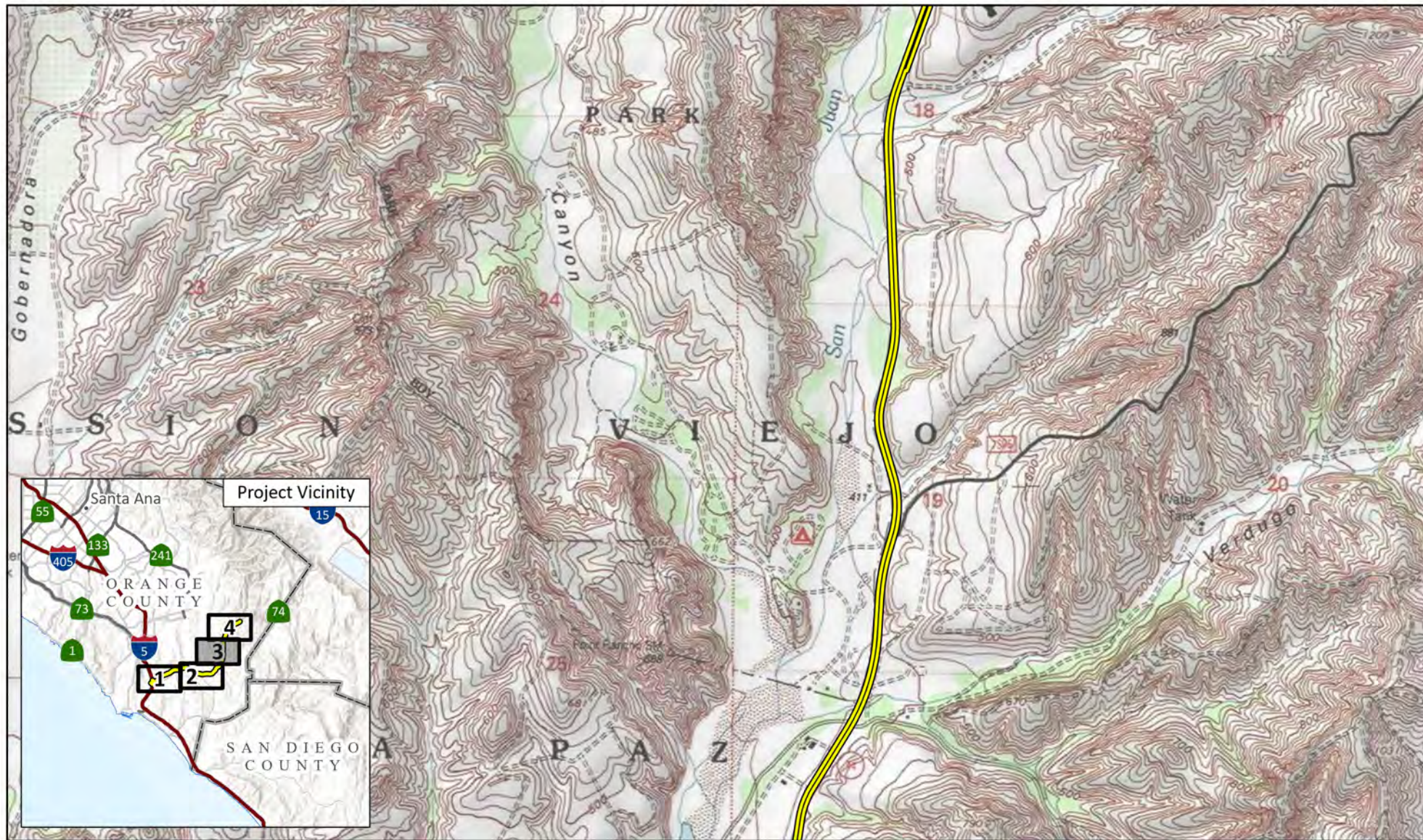
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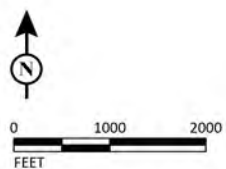
 Project Site

FIGURE 1  
Sheet 3 of 4



SOURCE: USGS 7.5' Quad - Canada Gobernadora, CA (1988)

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SR-74 Multi-Asset Management

Project Location

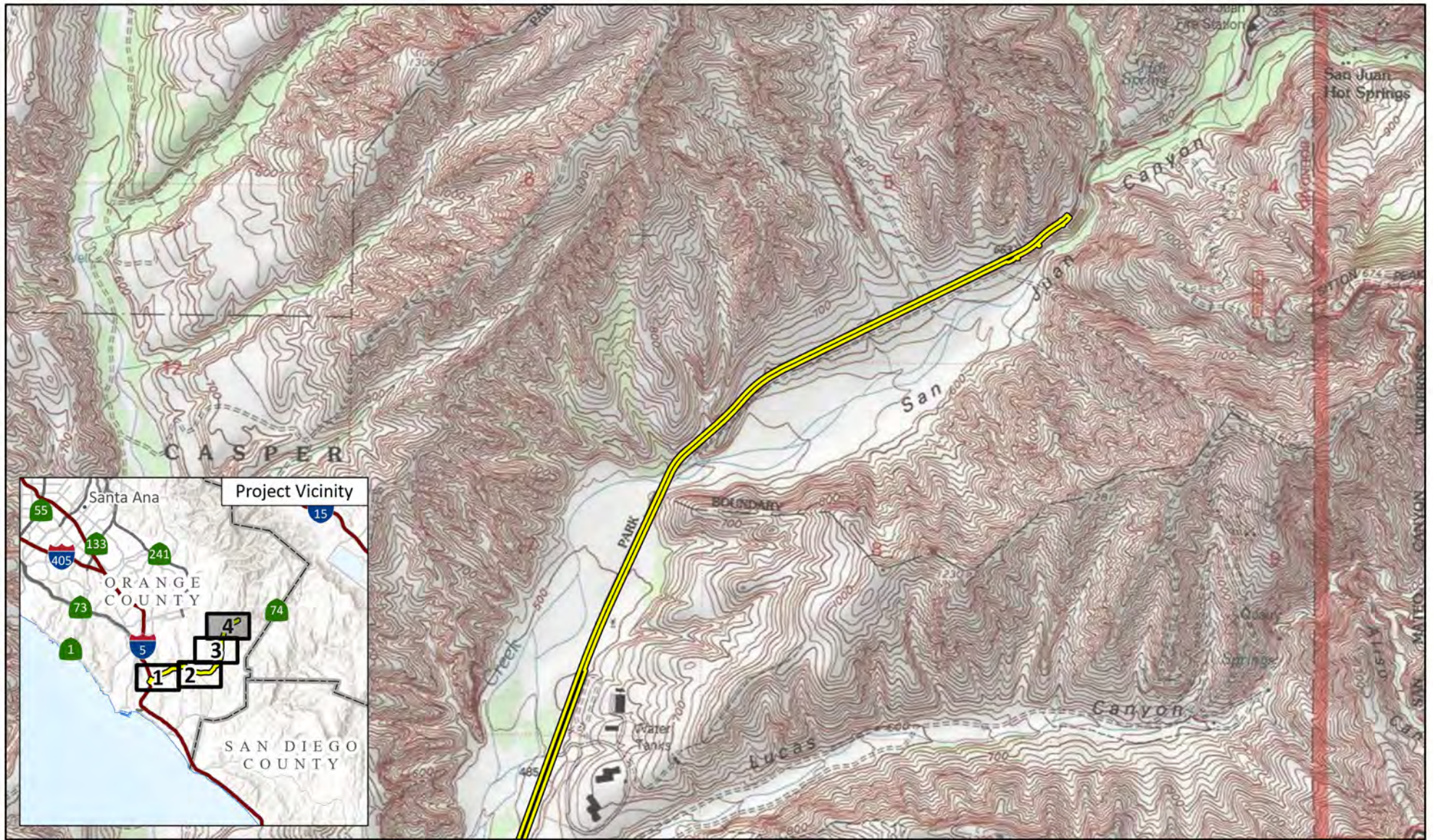
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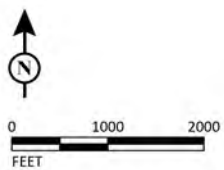
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 Project Site

FIGURE 1  
Sheet 4 of 4



SOURCE: USGS 7.5' Quad - Canada Gobernadora, CA (1988)

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SR-74 Multi-Asset Management

Project Location

12-ORA-SR7473 – PM 0.0-11.5

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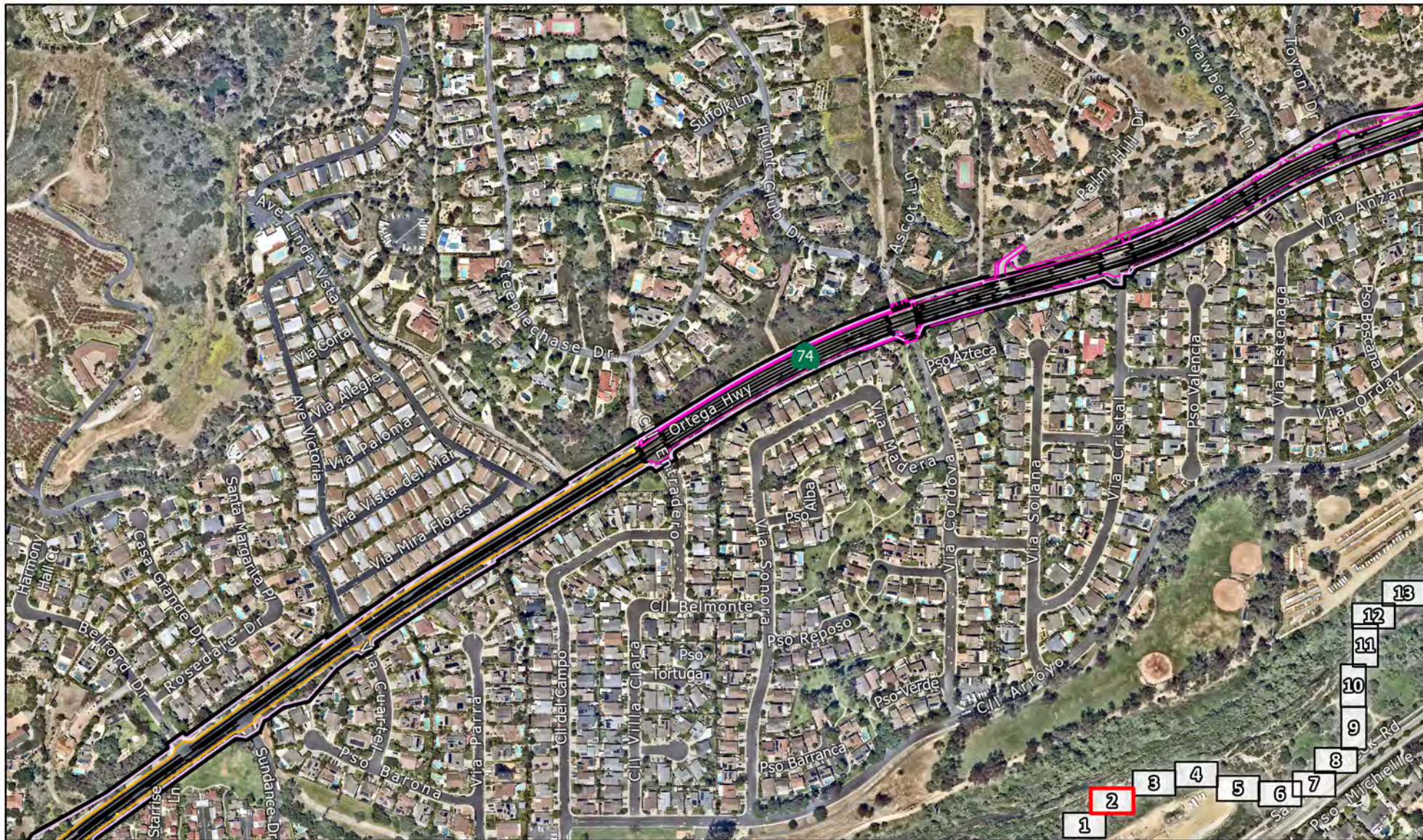
FIGURE 2  
Sheet 1 of 13

SR-74 Multi-Asset Management  
Proposed Project Components  
12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



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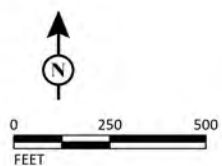




- Project Site**
- Proposed Project Components**
- Proposed Bike Lane Improvements
  - Edge of Pavement
  - Existing Right of Way
  - Existing Roadway
  - Existing Utilities

FIGURE 2  
Sheet 2 of 13

SR-74 Multi-Asset Management  
Proposed Project Components  
12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



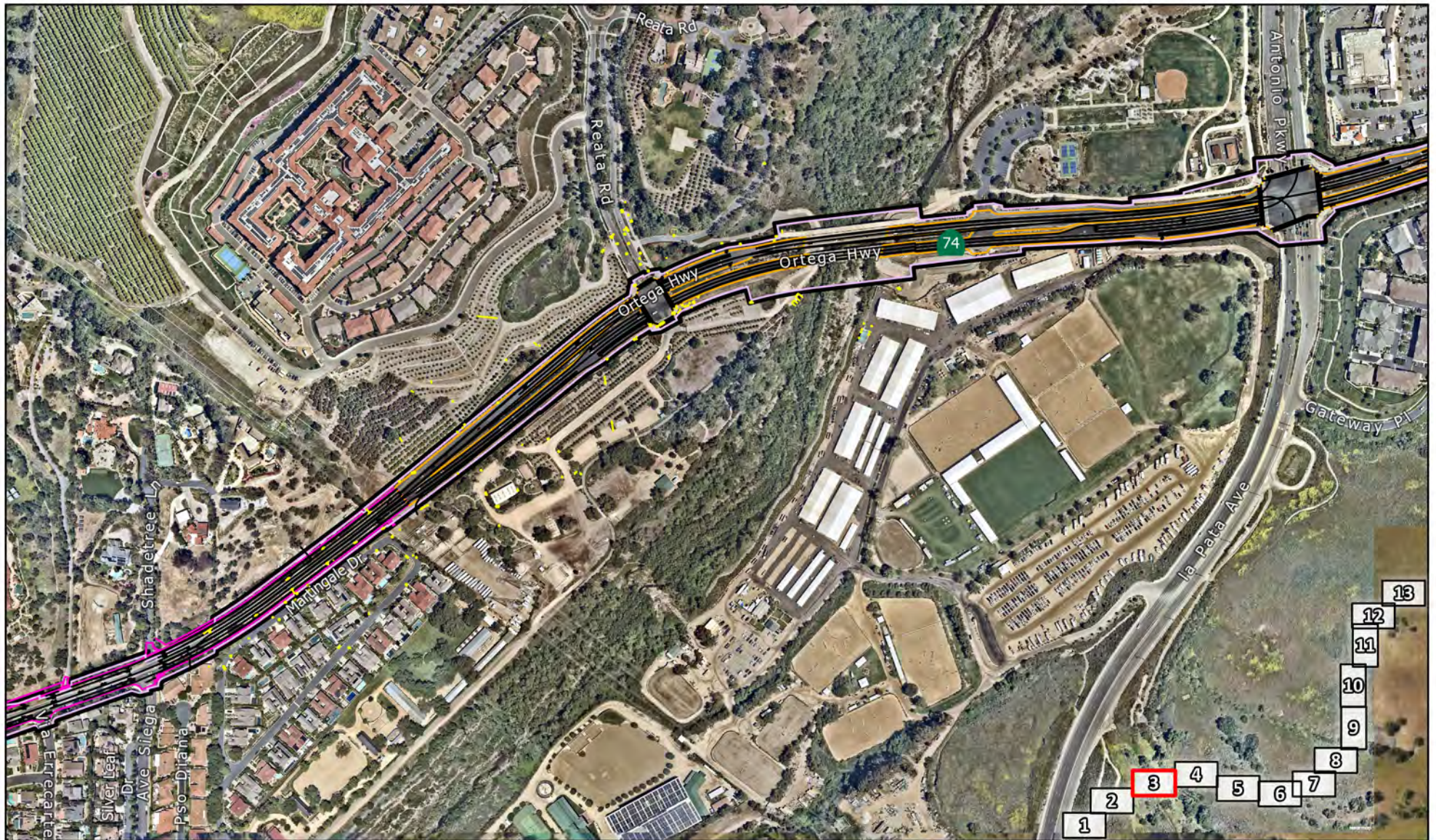
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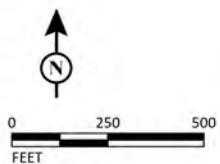


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- Project Site**
- Proposed Project Components**
- Proposed Bike Lane Improvements
  - Edge of Pavement
  - Existing Right of Way
  - Existing Roadway
  - Existing Utilities



SOURCE: Google (2024); Nearmap (5/7/2025)

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FIGURE 2  
Sheet 3 of 13

SR-74 Multi-Asset Management  
Proposed Project Components  
12-ORA-SR7473 – PM 0.0-11.5  
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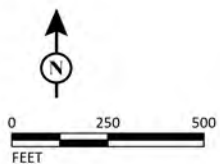


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- Project Site**
- Proposed Project Components**
- Proposed Drainage Repair
  - Proposed Culvert and Associated Work Area
  - Edge of Pavement
  - Existing Right of Way
  - Existing Roadway



SOURCE: Google (2024); Nearmap (5/7/2025)

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FIGURE 2  
Sheet 4 of 13

SR-74 Multi-Asset Management  
Proposed Project Components  
12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

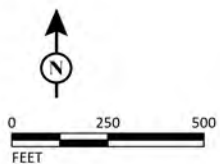


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- Project Site**
- Proposed Project Components**
- Proposed Drainage Repair
  - Proposed Culvert and Associated Work Area
  - Edge of Pavement
  - Existing Right of Way
  - Existing Roadway



SOURCE: Google (2024); Nearmap (5/7/2025)

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FIGURE 2  
Sheet 5 of 13

*SR-74 Multi-Asset Management*  
Proposed Project Components  
12-ORA-SR7473 – PM 0.0-11.5  
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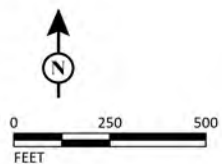


- Project Site**
- Proposed Project Components**
- Proposed Drainage Repair
  - Proposed Culvert and Associated Work Area
  - Edge of Pavement
  - Existing Right of Way
  - Existing Roadway

FIGURE 2  
Sheet 6 of 13

SR-74 Multi-Asset Management  
Proposed Project Components

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



SOURCE: Google (2024); Nearmap (5/7/2025)

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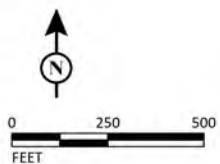


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-  Project Site
- Proposed Project Components**
-  Proposed Culvert and Associated Work Area
  -  Edge of Pavement
  -  Existing Right of Way
  -  Existing Roadway



SOURCE: Google (2024); Nearmap (5/7/2025)

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FIGURE 2  
Sheet 7 of 13

*SR-74 Multi-Asset Management*  
**Proposed Project Components**  
12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

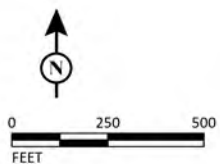


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-  Project Site
- Proposed Project Components**
-  Proposed Culvert and Associated Work Area
  -  Edge of Pavement
  -  Existing Right of Way
  -  Existing Roadway



SOURCE: Google (2024); Nearmap (5/7/2025)

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FIGURE 2  
Sheet 8 of 13

*SR-74 Multi-Asset Management*  
**Proposed Project Components**  
12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

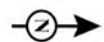


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- Project Site**
- Proposed Project Components**
- Proposed Culvert and Associated Work Area
  - Edge of Pavement
  - Existing Right of Way
  - Existing Roadway
  - Existing Utilities



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FEET

SOURCE: Google (2024); Nearmap (5/7/2025)

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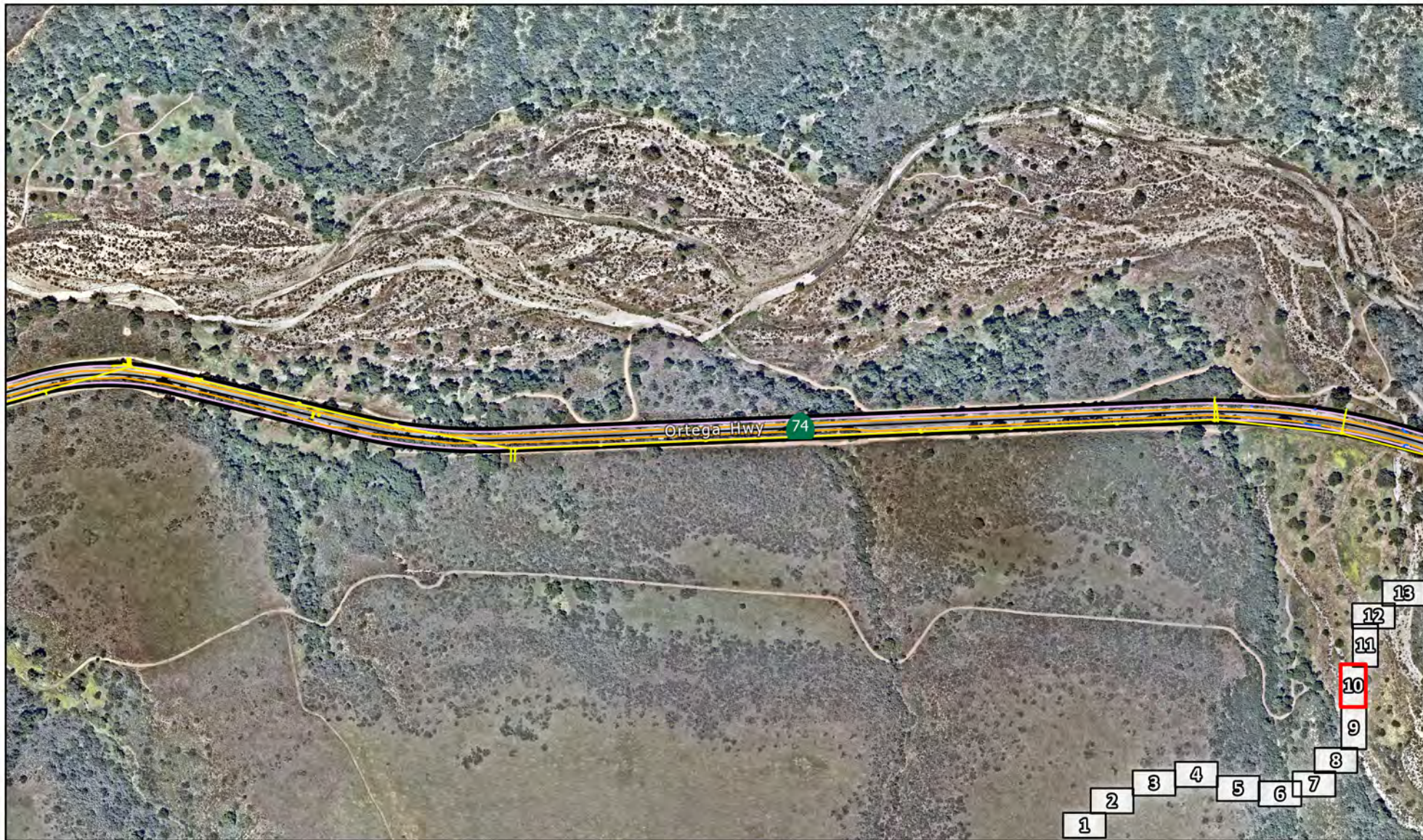
FIGURE 2  
Sheet 9 of 13







*SR-74 Multi-Asset Management*  
**Proposed Project Components**  
12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

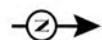


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-  Project Site
- Proposed Project Components**
-  Edge of Pavement
  -  Existing Right of Way
  -  Existing Roadway
  -  Existing Utilities
  -  Existing Drainage



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SOURCE: Google (2024); Nearmap (5/7/2025)

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FIGURE 2  
Sheet 10 of 13

*SR-74 Multi-Asset Management*  
**Proposed Project Components**  
12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

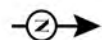


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- Project Site**
- Proposed Project Components**
- Edge of Pavement
  - Existing Right of Way
  - Existing Roadway
  - Existing Utilities
  - Existing Drainage



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SOURCE: Google (2024); Nearmap (5/7/2025)

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FIGURE 2  
Sheet 11 of 13

*SR-74 Multi-Asset Management*  
**Proposed Project Components**  
12-ORA-SR7473 – PM 0.0-11.5  
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 Project Site

Proposed Project Components

 Proposed Culvert and Associated Work Area

 Edge of Pavement

 Existing Right of Way

 Existing Roadway


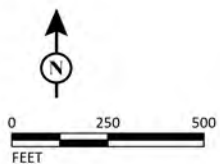
 Existing Utilities

FIGURE 2

Sheet 12 of 13



SOURCE: Google (2024); Nearmap (5/7/2025)

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SR-74 Multi-Asset Management

Proposed Project Components

12-ORA-SR7473 – PM 0.0-11.5

EA 0R990 1219000072



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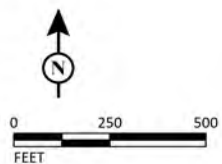




- Project Site**
- Proposed Project Components**
- Edge of Pavement
  - Existing Right of Way
  - Existing Roadway
  - Existing Utilities
  - Existing Drainage

FIGURE 2  
Sheet 13 of 13

*SR-74 Multi-Asset Management*  
**Proposed Project Components**  
 12-ORA-SR7473 – PM 0.0-11.5  
 EA 0R990 1219000072



SOURCE: Google (2024); Nearmap (5/7/2025)

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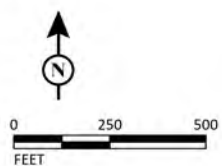
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- |   |  |
|---|--|
| <span style="border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> Project Site                   | <b>Vegetation</b>  |
| <span style="border: 2px solid green; display: inline-block; width: 20px; height: 10px;"></span> Critical Habitat - Arroyo Toad | <span style="background-color: grey; display: inline-block; width: 20px; height: 10px;"></span> Developed          |
|   | <span style="background-color: purple; display: inline-block; width: 20px; height: 10px;"></span> Ornamental trees |
|   | <span style="background-color: orange; display: inline-block; width: 20px; height: 10px;"></span> Ruderal          |

FIGURE 3  
Sheet 1 of 13



SOURCE: Google (2024); Nearmap (5/7/2025); USFWS (2020)

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SR-74 Multi-Asset Management  
Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



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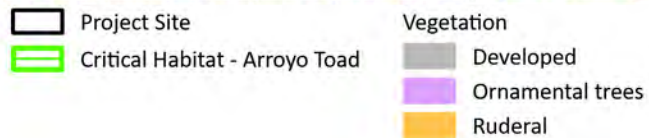
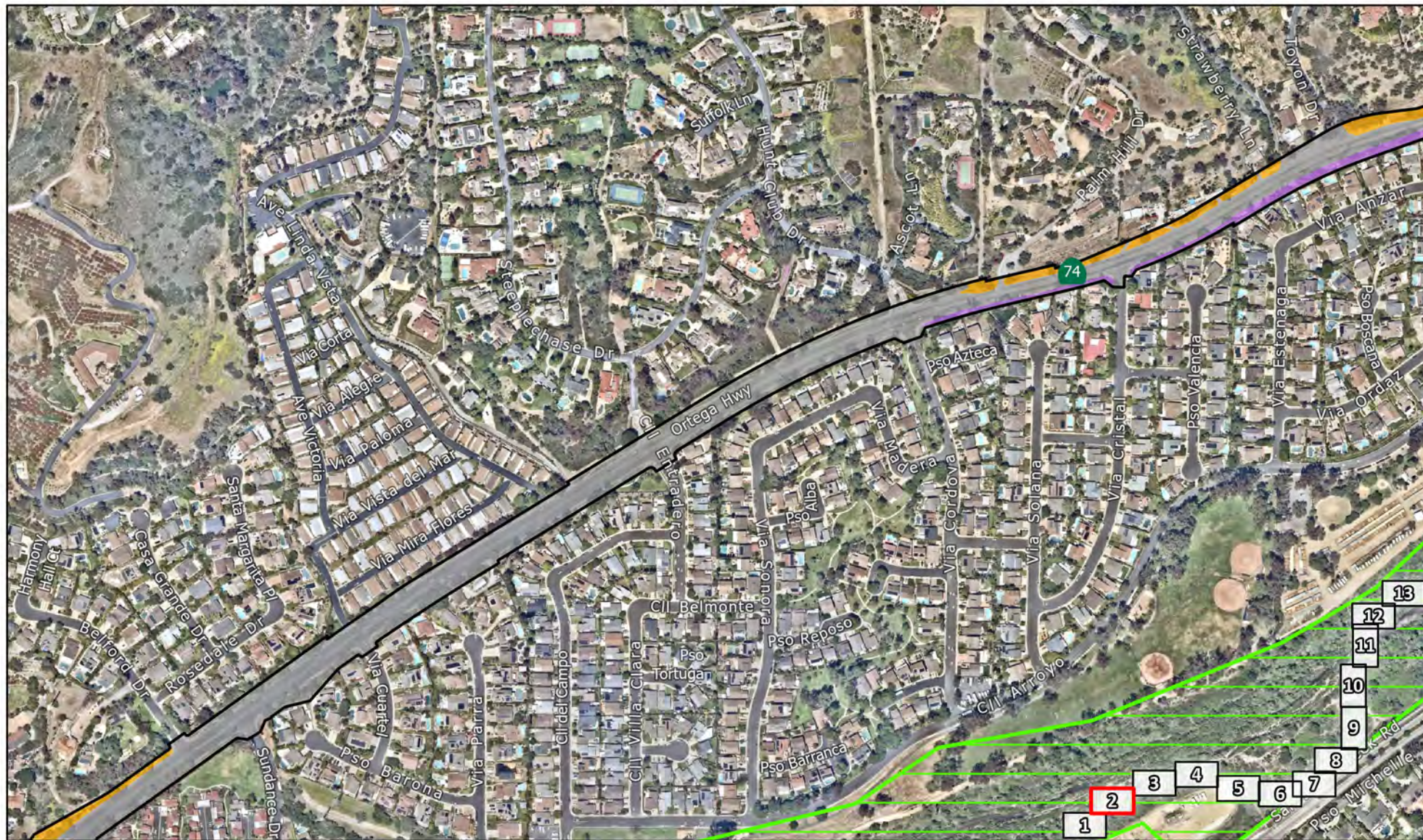
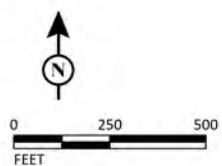


FIGURE 3  
Sheet 2 of 13



SOURCE: Google (2024); Nearmap (5/7/2025); USFWS (2020)

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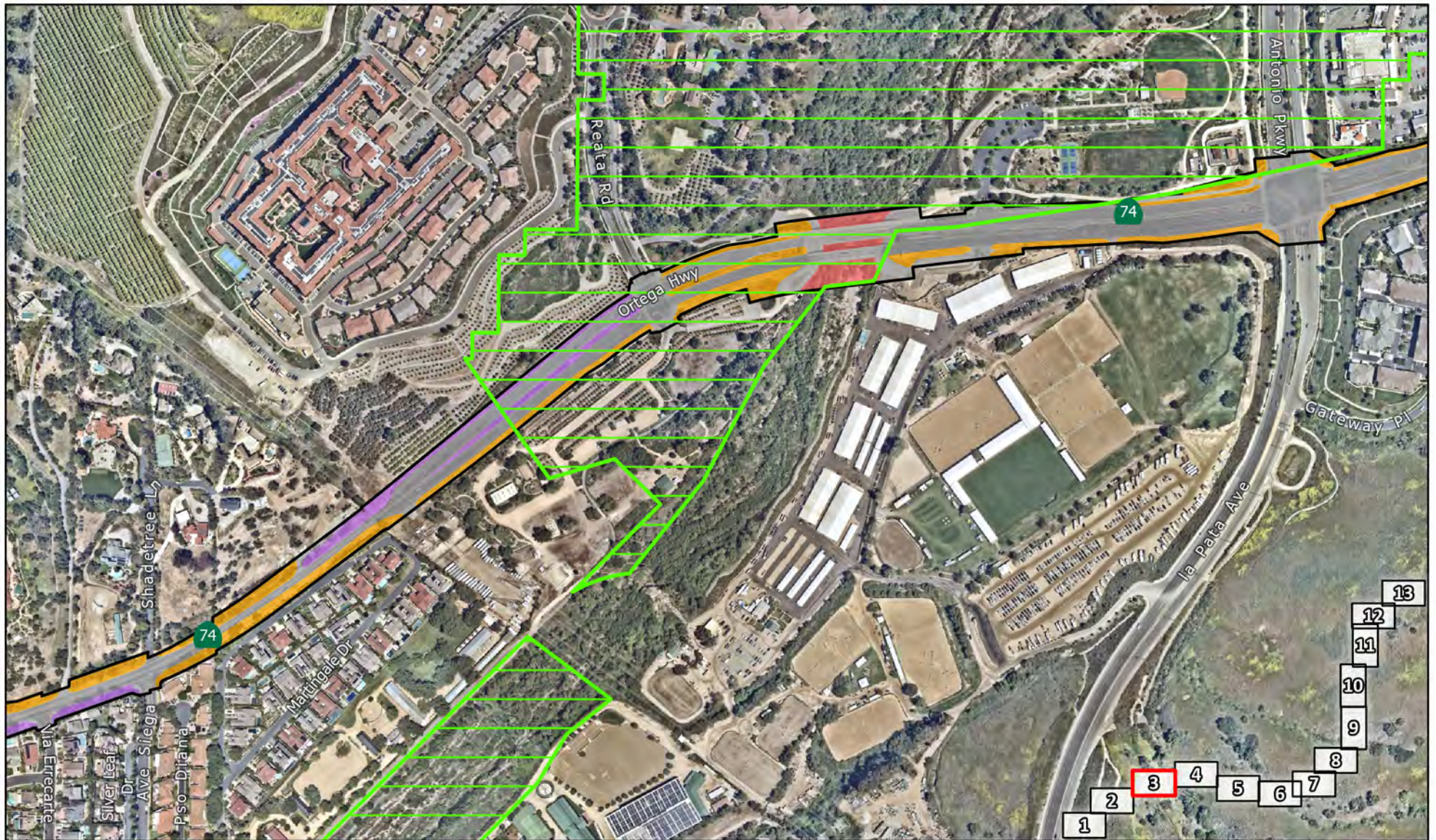
## SR-74 Multi-Asset Management Vegetation and Land Cover

12-ORA-SR7473 - PM 0.0-11.5  
EA 0R990 1219000072



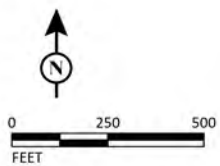
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- |              |                                |                                     |
|--------------|--------------------------------|-------------------------------------|
| Project Site | Critical Habitat - Arroyo Toad | <b>Vegetation</b>                   |
|              |                                | Developed                           |
|              |                                | Ornamental trees                    |
|              |                                | Ruderal                             |
|              |                                | Southern cottonwood willow riparian |

FIGURE 3  
Sheet 3 of 13



SOURCE: Google (2024); Nearmap (5/7/2025); USFWS (2020)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

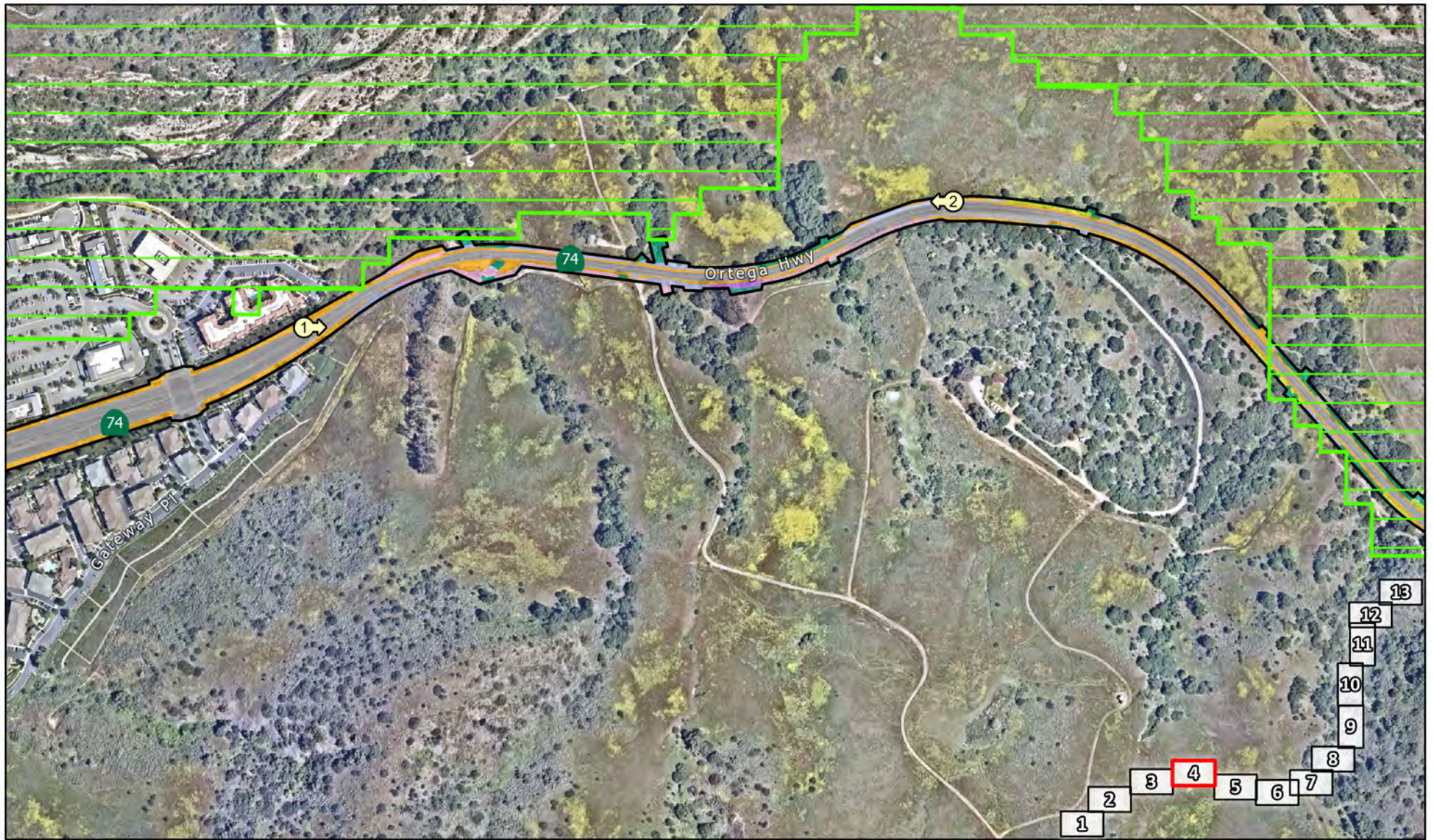
SR-74 Multi-Asset Management  
Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



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- Project Site
- Critical Habitat - Arroyo Toad
- ↻ Photograph Locations

- Vegetation**
- Chaparral
  - Coast live oak woodland
  - Coastal sage scrub
  - Developed
  - Nonnative grassland
  - Ornamental trees

- Ruderal
- Southern cottonwood willow riparian

**FIGURE 3**  
Sheet 4 of 13

*SR-74 Multi-Asset Management*  
**Vegetation and Land Cover**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

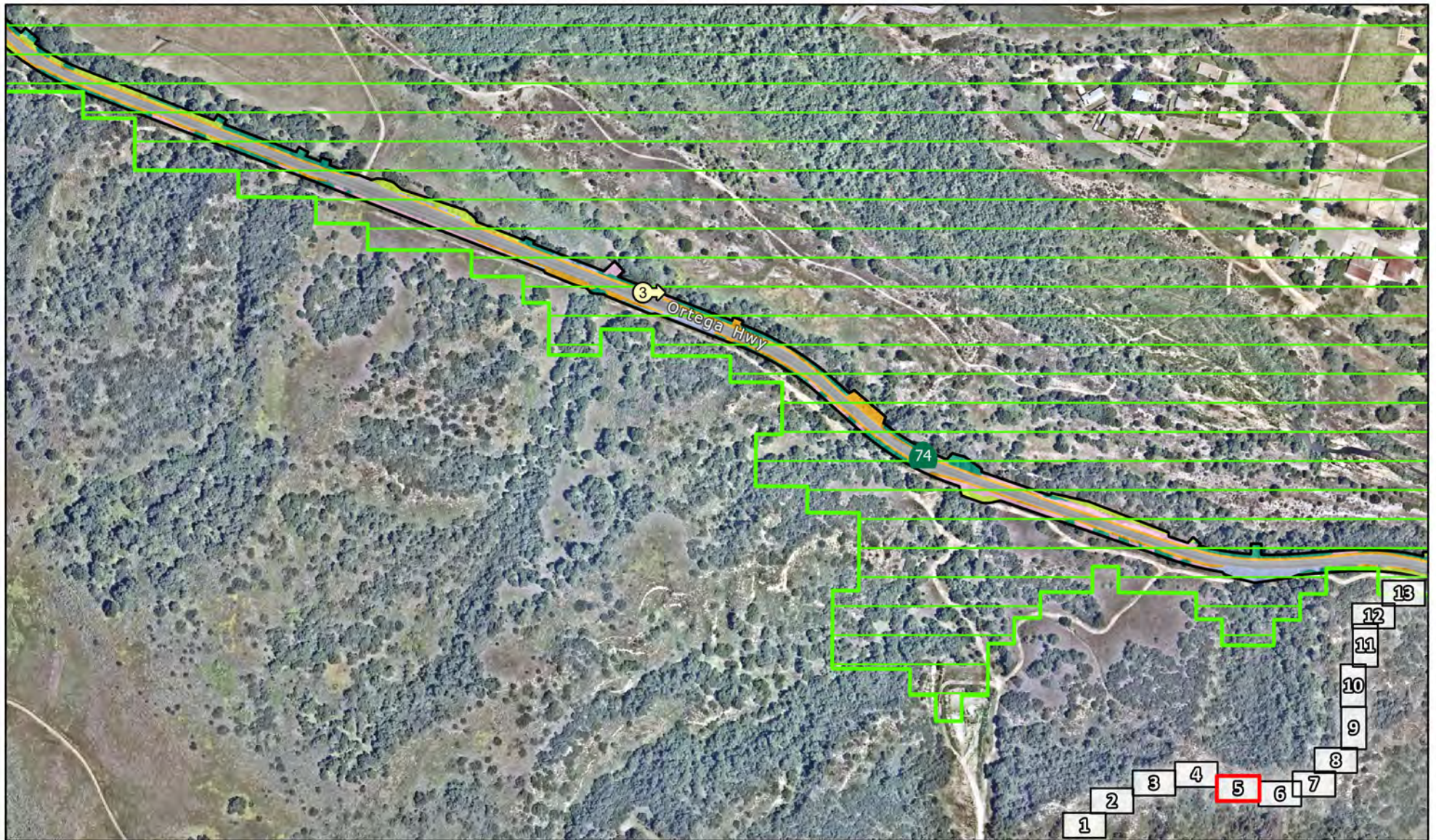
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- Project Site
- Critical Habitat - Arroyo Toad
- Photograph Locations

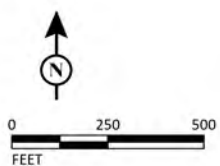
- Vegetation**
- Chaparral
  - Coast live oak woodland
  - Coastal sage scrub
  - Developed
  - Nonnative grassland
  - Ruderal

FIGURE 3

Sheet 5 of 13

*SR-74 Multi-Asset Management*  
Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



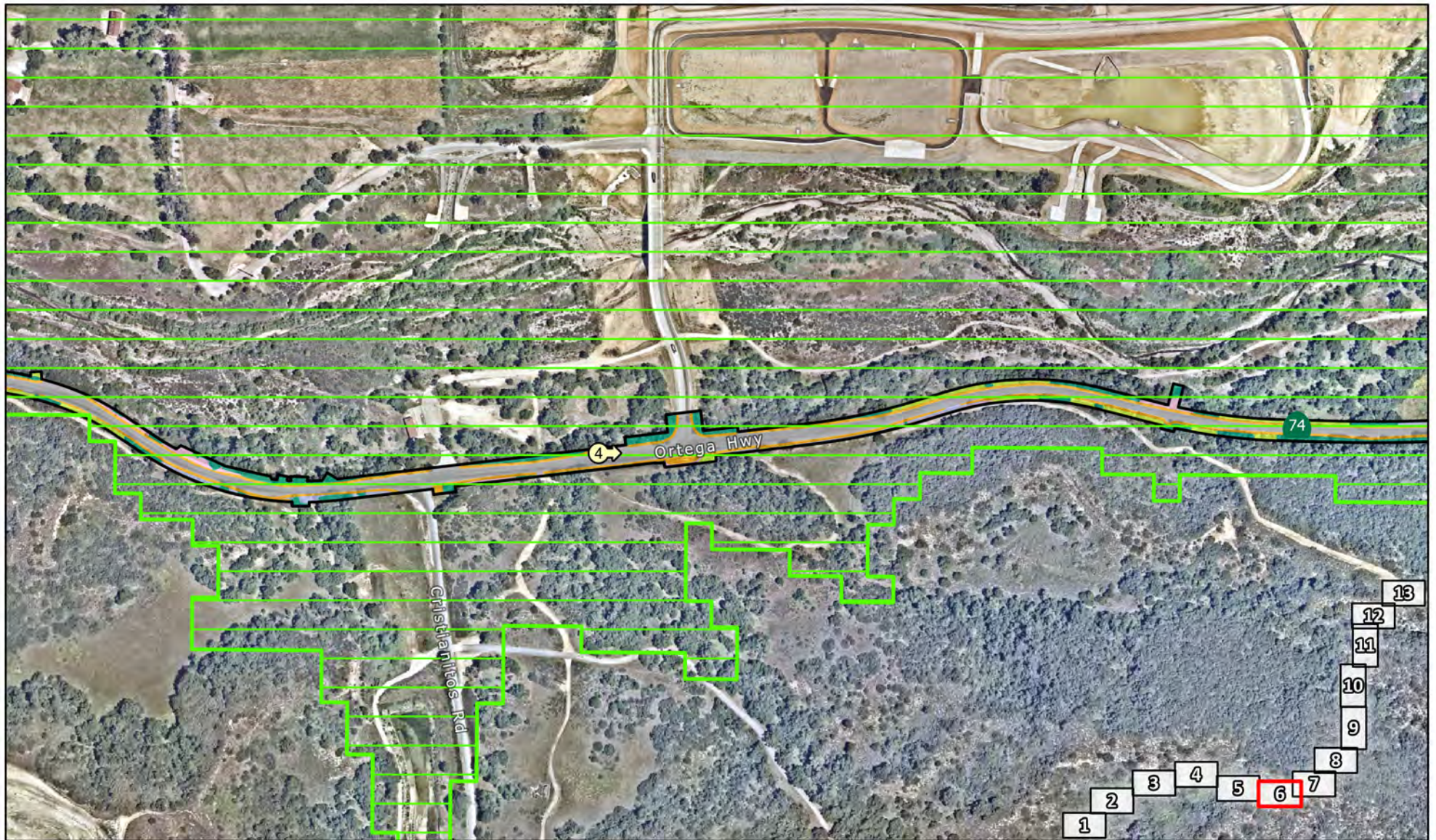
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- Project Site
- Critical Habitat - Arroyo Toad
- Photograph Locations

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal

FIGURE 3  
Sheet 6 of 13

*SR-74 Multi-Asset Management*  
**Vegetation and Land Cover**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

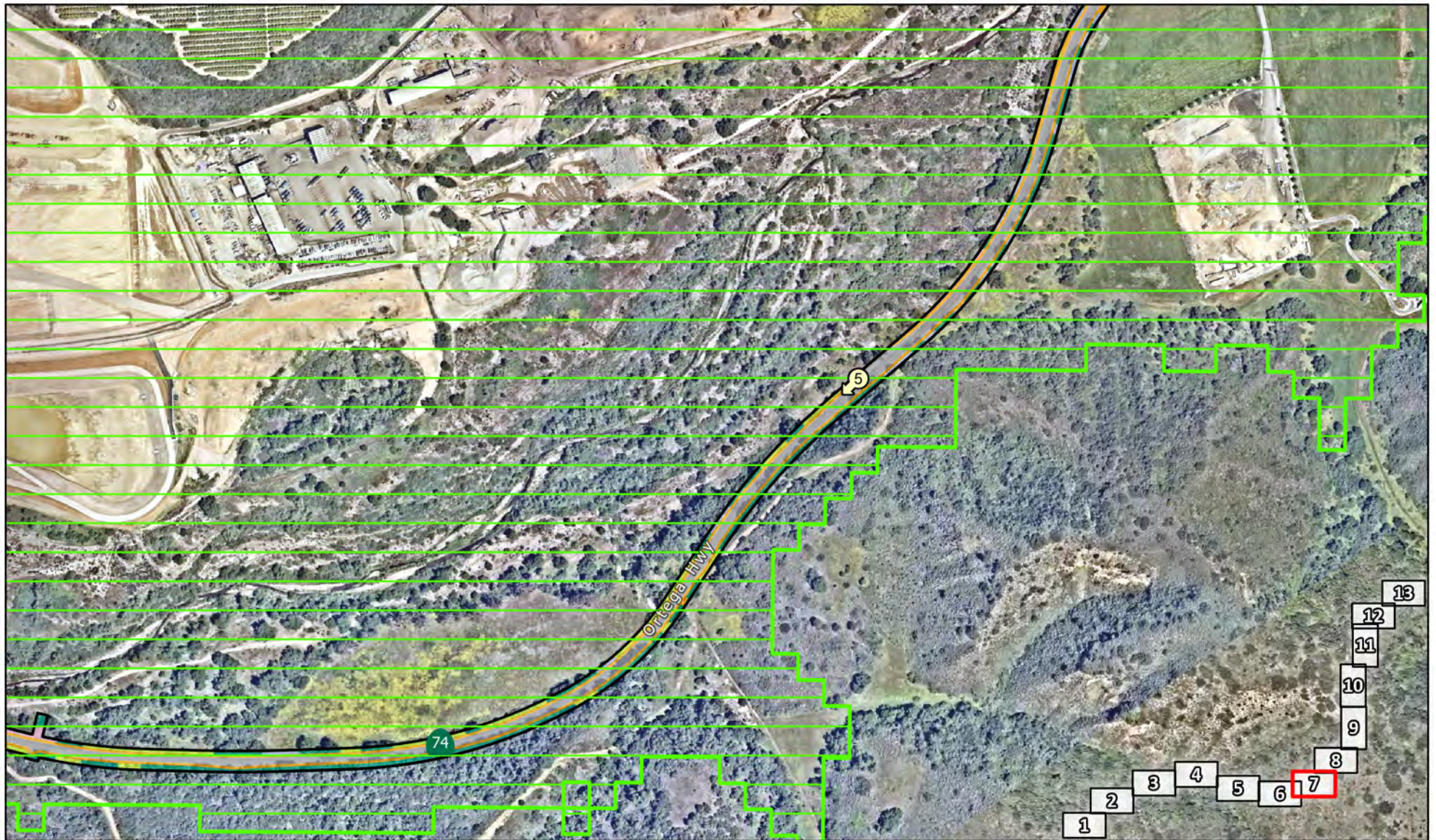
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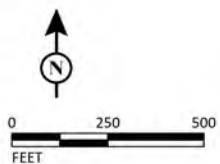


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- |                                |                         |
|--------------------------------|-------------------------|
| Project Site                   | Vegetation              |
| Critical Habitat - Arroyo Toad | Chaparral               |
| Photograph Locations           | Coast live oak woodland |
|                                | Coastal sage scrub      |
|                                | Developed               |
|                                | Nonnative grassland     |
|                                | Ruderal                 |



SOURCE: Google (2024); Nearmap (5/7/2025); USFWS (2020)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 3

Sheet 7 of 13

*SR-74 Multi-Asset Management*  
Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA OR990 1219000072



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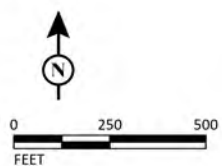


- |                                |                         |
|--------------------------------|-------------------------|
| Project Site                   | Chaparral               |
| Critical Habitat - Arroyo Toad | Coast live oak woodland |
| Photograph Locations           | Developed               |
|                                | Nonnative grassland     |
|                                | Ruderal                 |

FIGURE 3  
Sheet 8 of 13

SR-74 Multi-Asset Management  
Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



SOURCE: Google (2024); Nearmap (5/7/2025); USFWS (2020)

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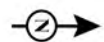


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- |                                |                         |
|--------------------------------|-------------------------|
| Project Site                   | Chaparral               |
| Critical Habitat - Arroyo Toad | Coast live oak woodland |
| Photograph Locations           | Coastal sage scrub      |
|                                | Developed               |
|                                | Nonnative grassland     |
|                                | Ruderal                 |



0 250 500  
FEET

SOURCE: Google (2024); Nearmap (5/7/2025); USFWS (2020)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 3

Sheet 9 of 13

SR-74 Multi-Asset Management  
Vegetation and Land Cover

12-ORA-SR7473 - PM 0.0-11.5  
EA 0R990 1219000072



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Project Site  
Photograph Locations

Vegetation  
Chaparral  
Coast live oak woodland  
Coastal sage scrub  
Developed  
Nonnative grassland  
Ruderal

FIGURE 3  
Sheet 10 of 13

SR-74 Multi-Asset Management  
Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

SOURCE: Google (2024); Nearmap (5/7/2025); USFWS (2020)

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Project Site  
 Critical Habitat - Arroyo Toad

**Vegetation**  
 Chaparral  
 Coast live oak woodland  
 Coastal sage scrub  
 Developed  
 Nonnative grassland  
 Ruderal



0 250 500  
 FEET

SOURCE: Google (2024); Nearmap (5/7/2025); USFWS (2020)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 3  
 Sheet 11 of 13

SR-74 Multi-Asset Management  
 Vegetation and Land Cover

12-ORA-SR7473 - PM 0.0-11.5  
 EA 0R990 1219000072



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Project Site

Vegetation

Southern cottonwood willow riparian

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal

FIGURE 3  
Sheet 12 of 13

SR-74 Multi-Asset Management  
Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



SOURCE: Google (2024); Nearmap (5/7/2025); USFWS (2020)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)



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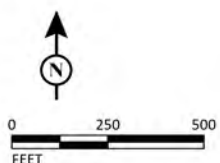




Project Site

Vegetation

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal



SOURCE: Google (2024); Nearmap (5/7/2025); USFWS (2020)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 3

Sheet 13 of 13

SR-74 Multi-Asset Management  
Vegetation and Land Cover

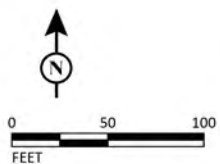
12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



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- Project Site
- Jurisdictional Features**
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)

FIGURE 4  
Sheet 1 of 24



SR-74 Multi-Asset Management  
Jurisdictional Areas

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

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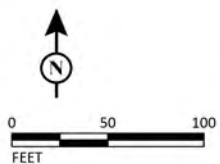




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- Project Site  
 Jurisdictional Features  
 CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)

FIGURE 4  
Sheet 3 of 24

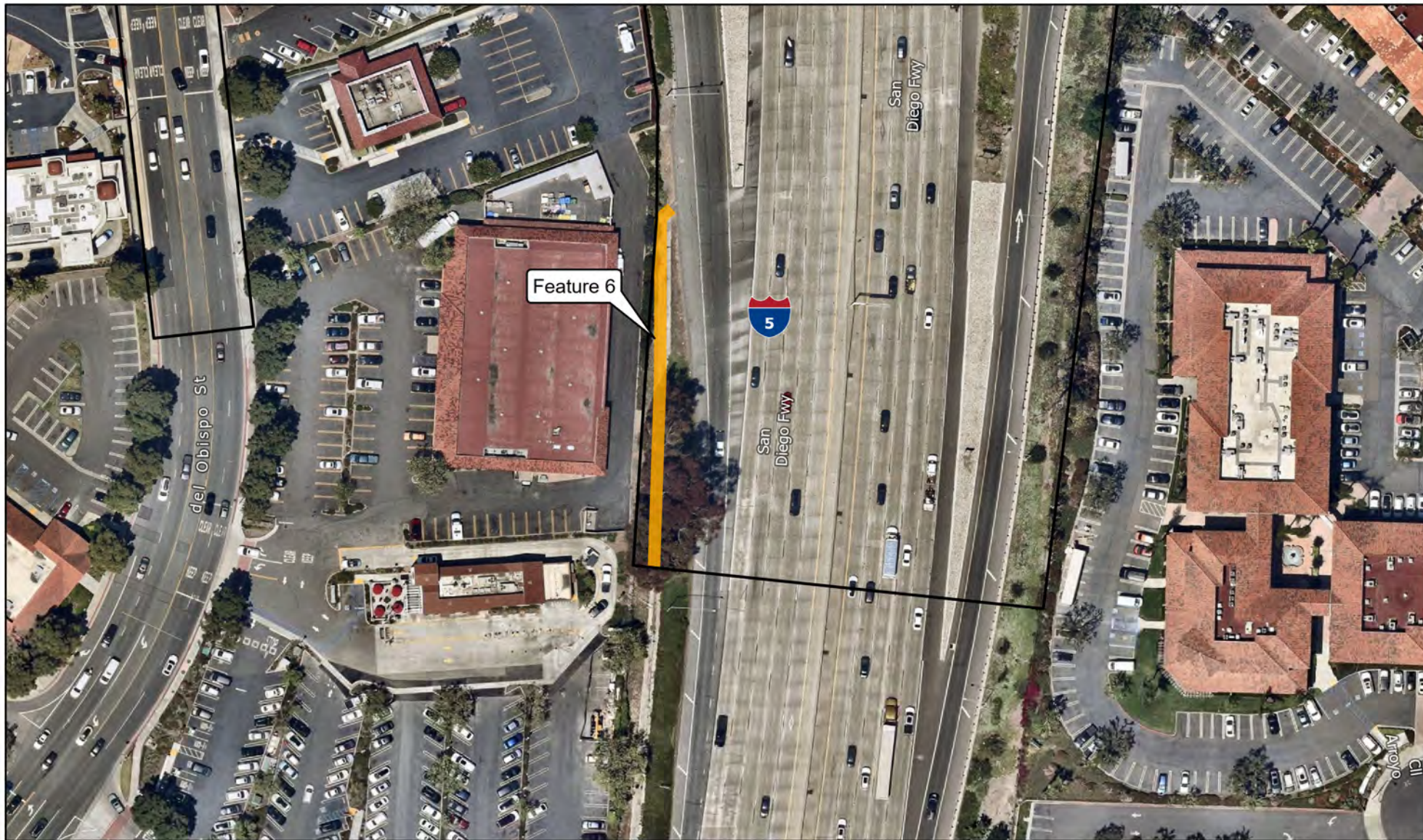


SR-74 Multi-Asset Management  
Jurisdictional Areas

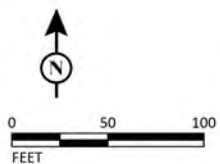
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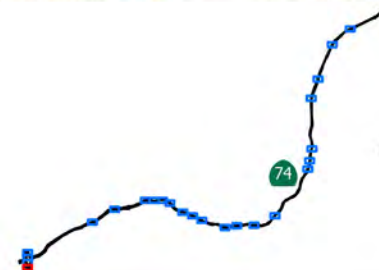
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 Jurisdictional Features  
 CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)

FIGURE 4  
Sheet 4 of 24



SR-74 Multi-Asset Management  
Jurisdictional Areas

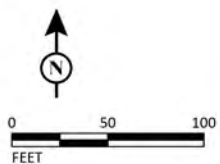
12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

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- Project Site
- Culvert
- Jurisdictional Features
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)

FIGURE 4  
Sheet 5 of 24



SR-74 Multi-Asset Management  
Jurisdictional Areas

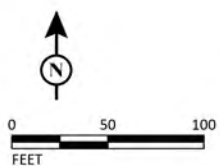
12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



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- Project Site
- Low Flow Channel
- Jurisdictional Features**
  - CDFW Riparian/USACE Wetland Waters/RWQCB Wetland Waters
  - CDFW Streambed/USACE Nonwetland Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)



FIGURE 4  
Sheet 6 of 24

*SR-74 Multi-Asset Management*  
**Jurisdictional Areas**

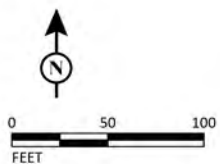
12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

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- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
- CDFW Riparian
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)



FIGURE 4  
Sheet 7 of 24

*SR-74 Multi-Asset Management*  
**Jurisdictional Areas**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

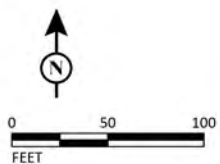


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- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
  - CDFW Riparian
  - CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)



FIGURE 4  
Sheet 8 of 24

*SR-74 Multi-Asset Management*  
**Jurisdictional Areas**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

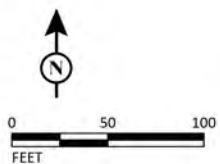


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- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)



FIGURE 4  
Sheet 9 of 24

*SR-74 Multi-Asset Management*  
**Jurisdictional Areas**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

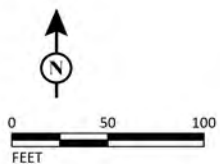


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- Project Site
- Non-jurisdictional Above Ground Feature
- Non-jurisdictional Underground Feature
- Culvert



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)



FIGURE 4  
Sheet 10 of 24

*SR-74 Multi-Asset Management*  
Jurisdictional Areas

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

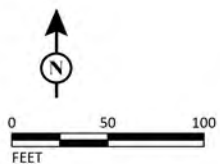


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- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)



FIGURE 4  
Sheet 11 of 24

*SR-74 Multi-Asset Management*  
**Jurisdictional Areas**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

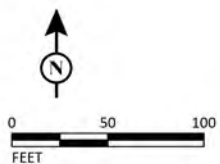


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- Project Site
- Non-jurisdictional Above Ground Feature
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
  - CDFW Riparian
  - CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)



FIGURE 4  
Sheet 12 of 24

*SR-74 Multi-Asset Management*  
**Jurisdictional Areas**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

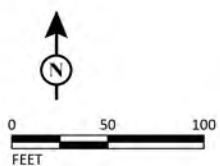


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- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
- CDFW Riparian
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)



FIGURE 4  
Sheet 13 of 24

*SR-74 Multi-Asset Management*  
**Jurisdictional Areas**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

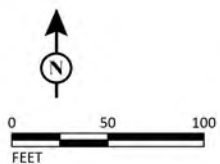


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- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
  - CDFW Riparian
  - CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)

FIGURE 4  
Sheet 14 of 24



*SR-74 Multi-Asset Management*  
**Jurisdictional Areas**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

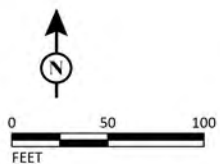


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- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)



FIGURE 4  
Sheet 15 of 24

*SR-74 Multi-Asset Management*  
**Jurisdictional Areas**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

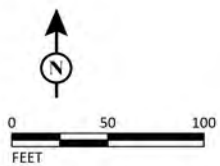


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- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)

FIGURE 4  
Sheet 16 of 24



*SR-74 Multi-Asset Management*  
**Jurisdictional Areas**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

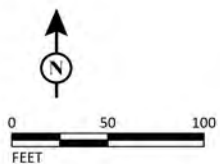


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- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)



FIGURE 4  
Sheet 17 of 24

*SR-74 Multi-Asset Management*  
Jurisdictional Areas

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

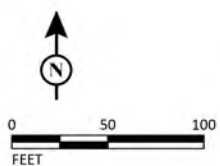


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- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
  - CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)



FIGURE 4  
Sheet 18 of 24

*SR-74 Multi-Asset Management*  
**Jurisdictional Areas**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

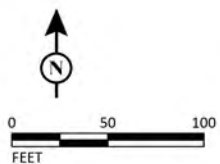


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- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)



FIGURE 4  
Sheet 19 of 24

*SR-74 Multi-Asset Management*  
Jurisdictional Areas




12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

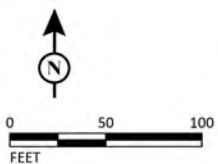


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-  Project Site
-  Non-jurisdictional Underground Feature
-  Culvert



SOURCE: Nearmap (5/7/2025)

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FIGURE 4  
Sheet 20 of 24

SR-74 Multi-Asset Management  
Jurisdictional Areas

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

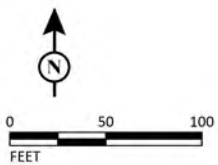


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- Project Site
- Culvert



SOURCE: Nearmap (5/7/2025)

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FIGURE 4  
Sheet 21 of 24

*SR-74 Multi-Asset Management*  
Jurisdictional Areas

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

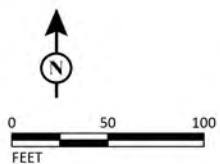


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- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)

FIGURE 4  
Sheet 22 of 24



*SR-74 Multi-Asset Management*  
Jurisdictional Areas

12-ORA-SR7473 – PM 0.0-11.5  
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FIGURE 4  
Sheet 23 of 24



SOURCE: Nearmap (5/7/2025)

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SR-74 Multi-Asset Management  
Jurisdictional Areas

12-ORA-SR7473 – PM 0.0-11.5  
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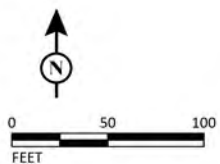


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- Project Site
- Non-jurisdictional Underground Feature
- Culvert



SOURCE: Nearmap (5/7/2025)

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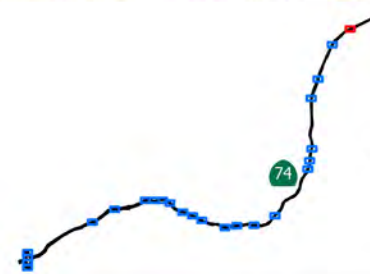


FIGURE 4  
Sheet 24 of 24

*SR-74 Multi-Asset Management*  
Jurisdictional Areas

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



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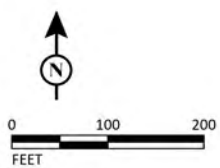




FIGURE 5  
Sheet 1 of 39

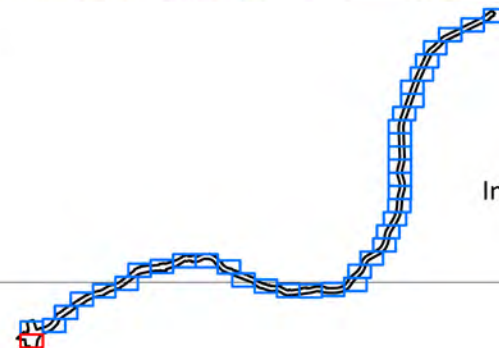
SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



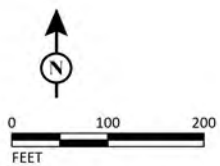
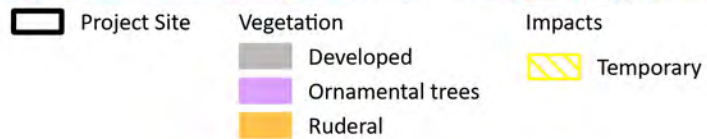
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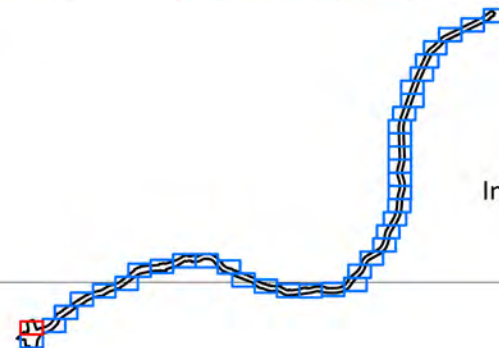
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I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 5  
Sheet 2 of 39

# SR-74 Multi-Asset Management Impacts to Vegetation and Land Cover

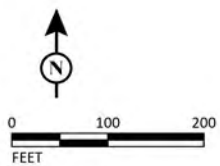
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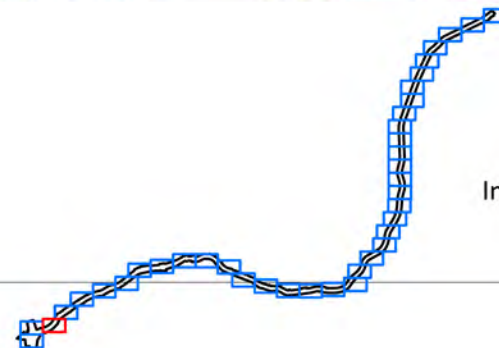
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I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 5  
Sheet 3 of 39

SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

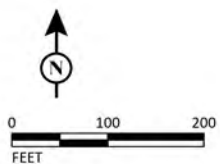
12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





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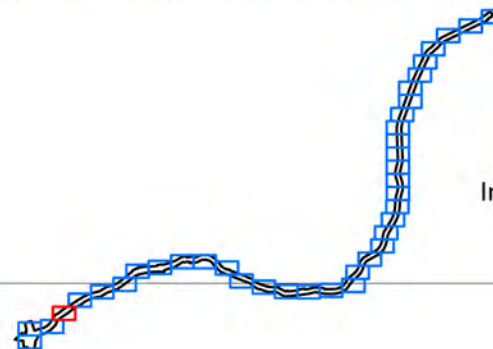
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I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 5  
Sheet 4 of 39

# SR-74 Multi-Asset Management Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

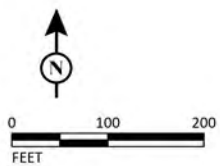




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Project Site
  Vegetation
  Impacts
  Developed
  Temporary



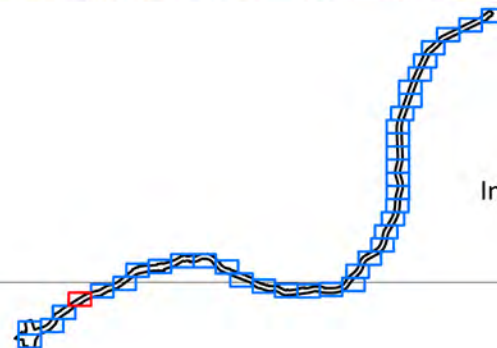
SOURCE: Google (2024); Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 5  
Sheet 5 of 39

SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





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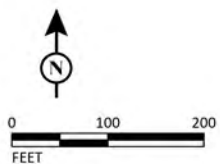
Project Site

Vegetation

Developed

Ornamental trees

Ruderal



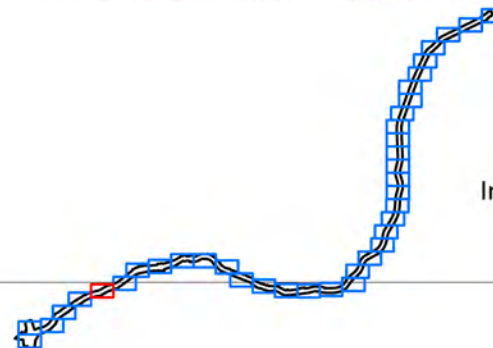
SOURCE: Google (2024); Nearmap (5/7/2025)

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FIGURE 5  
Sheet 6 of 39

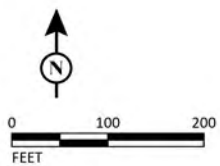
SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



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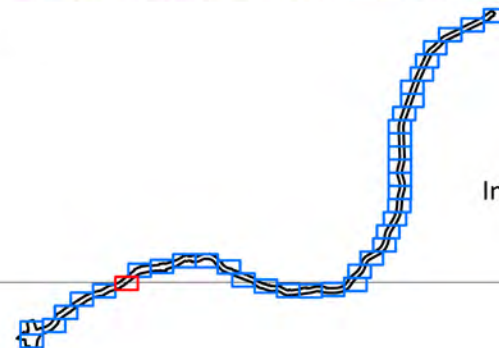
SOURCE: Google (2024); Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 5  
Sheet 7 of 39

SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



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Project Site

#### Vegetation

- Developed
- Ornamental trees
- Ruderal
- Southern cottonwood willow riparian

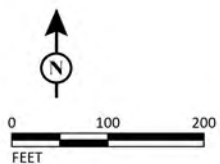
#### Impacts

- Temporary

FIGURE 5  
Sheet 8 of 39

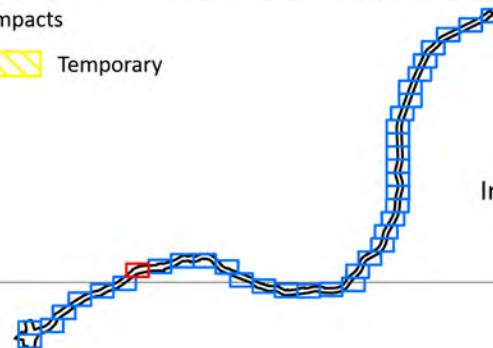
### SR-74 Multi-Asset Management Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



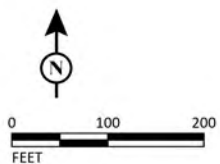
SOURCE: Google (2024); Nearmap (5/7/2025)

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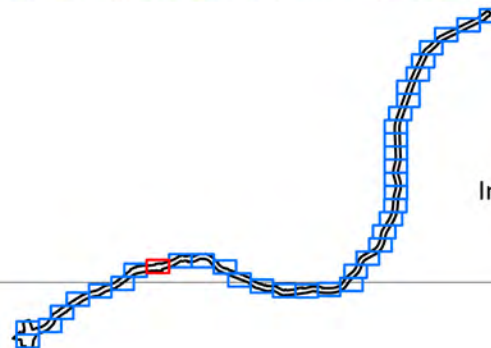
SOURCE: Google (2024); Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 5  
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SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



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Project Site

Vegetation

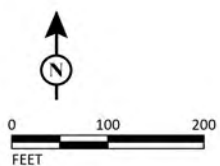
- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ornamental trees
- Ruderal

Southern cottonwood willow riparian

Impacts

Temporary

FIGURE 5  
Sheet 10 of 39

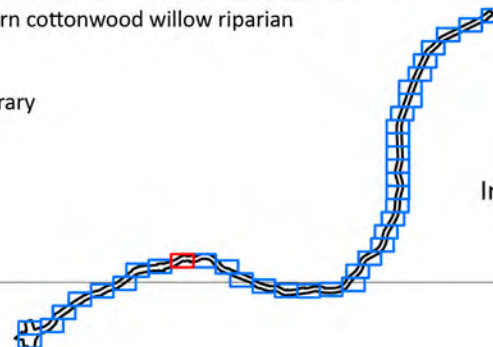


SOURCE: Google (2024); Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
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Project Site

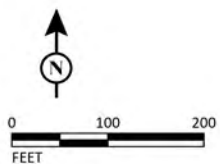
Vegetation

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ornamental trees
- Ruderal

Southern cottonwood willow riparian

Impacts

- Permanent
- Temporary



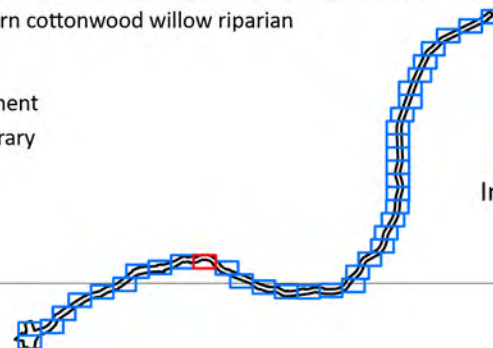
SOURCE: Google (2024); Nearmap (5/7/2025)

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FIGURE 5  
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SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
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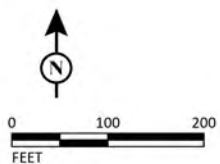
Project Site

Vegetation

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal

Impacts

- Temporary



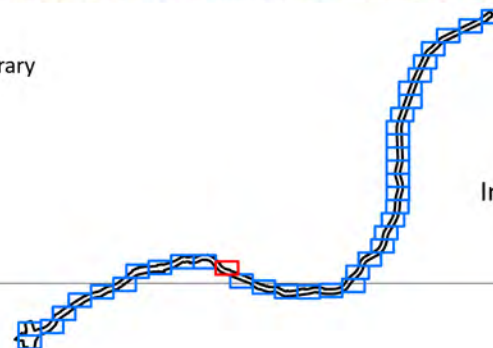
SOURCE: Google (2024); Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 5  
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SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 - PM 0.0-11.5  
EA 0R990 1219000072



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Project Site

Vegetation

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal

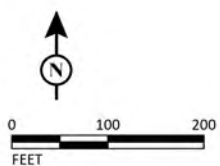
Impacts

- Permanent
- Temporary

FIGURE 5  
Sheet 13 of 39

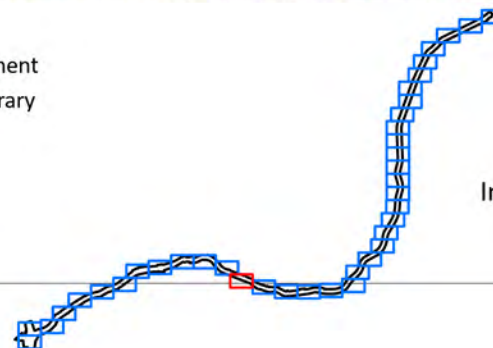
SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



SOURCE: Google (2024); Nearmap (5/7/2025)

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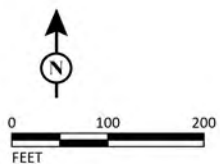
Project Site

#### Vegetation

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal

#### Impacts

- Temporary



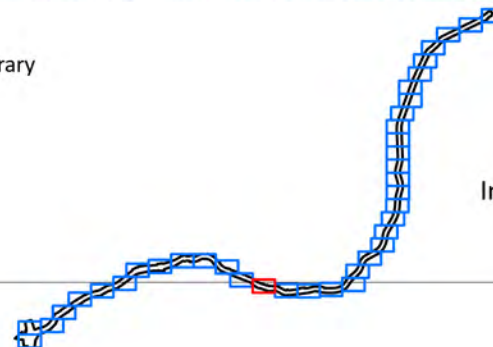
SOURCE: Google (2024); Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 5  
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### SR-74 Multi-Asset Management Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
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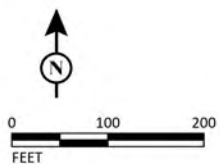
Project Site

Vegetation

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal

Impacts

- Temporary



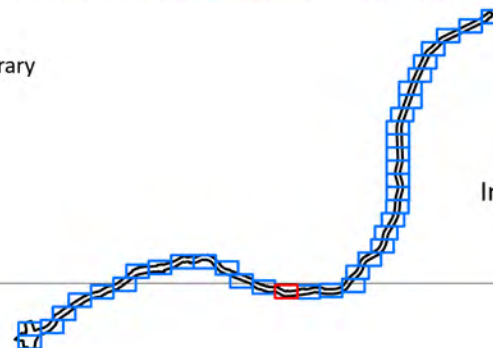
SOURCE: Google (2024); Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 5  
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SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



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Project Site

Vegetation

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal

Impacts

- Permanent
- Temporary



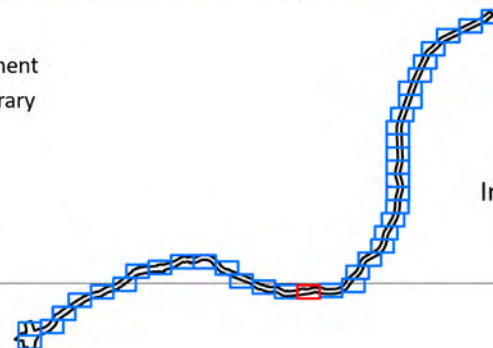
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I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 5  
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# SR-74 Multi-Asset Management Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



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Project Site

#### Vegetation

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal

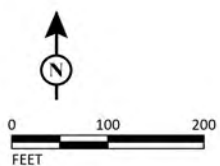
#### Impacts

- Temporary

FIGURE 5  
Sheet 17 of 39

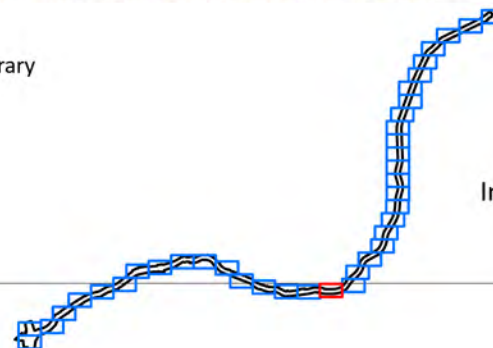
### SR-74 Multi-Asset Management Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



SOURCE: Google (2024); Nearmap (5/7/2025)

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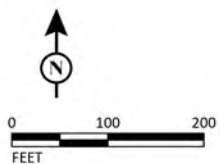
Project Site

Vegetation

- Chaparral
- Coast live oak woodland
- Developed
- Nonnative grassland
- Ruderal

Impacts

- Temporary



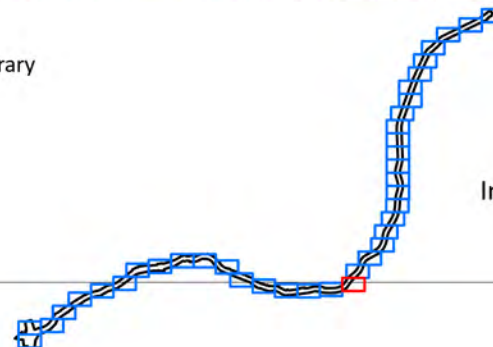
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I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 5  
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SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





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Project Site

Vegetation

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal

Impacts

- Temporary



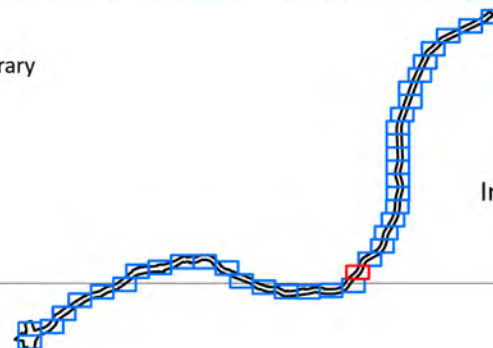
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I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 5  
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SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





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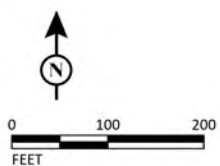
Project Site

Vegetation

- Chaparral
- Coast live oak woodland
- Developed
- Nonnative grassland
- Ruderal

Impacts

- Permanent
- Temporary



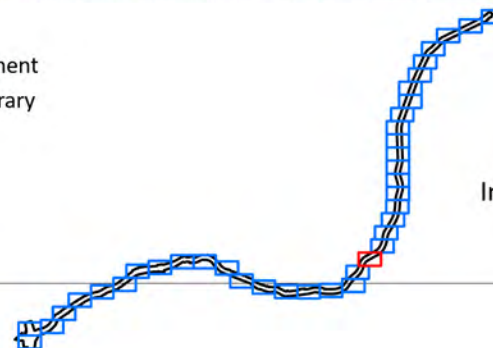
SOURCE: Google (2024); Nearmap (5/7/2025)

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FIGURE 5  
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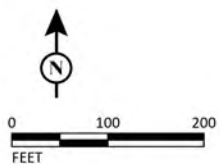
SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





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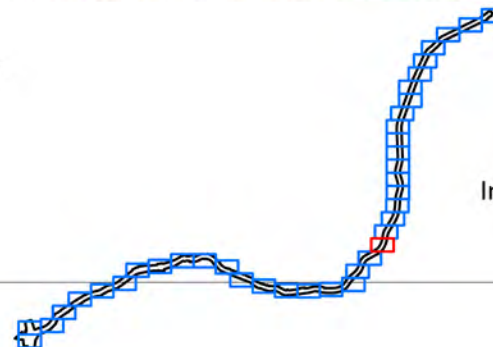
SOURCE: Google (2024); Nearmap (5/7/2025)

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FIGURE 5  
Sheet 21 of 39

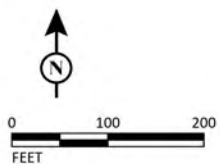
*SR-74 Multi-Asset Management*  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





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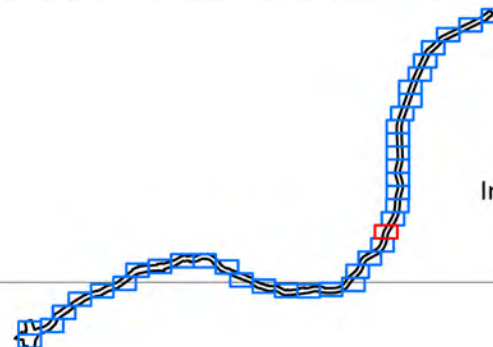
SOURCE: Google (2024); Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 5  
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*SR-74 Multi-Asset Management*  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





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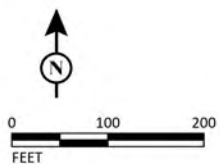
Project Site

Vegetation

- Chaparral
- Coast live oak woodland
- Developed
- Nonnative grassland
- Ruderal

Impacts

Temporary



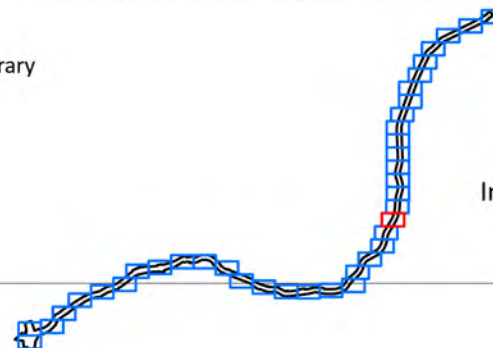
SOURCE: Google (2024); Nearmap (5/7/2025)

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FIGURE 5  
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SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





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Project Site

Vegetation

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal

Impacts

- Temporary



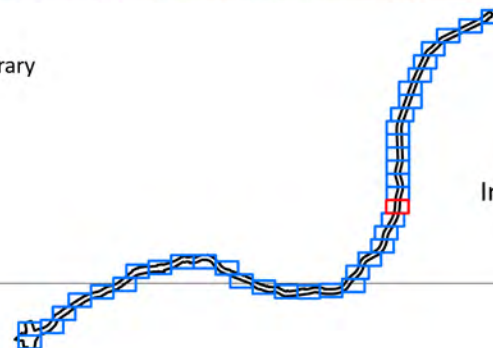
SOURCE: Google (2024); Nearmap (5/7/2025)

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FIGURE 5  
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# SR-74 Multi-Asset Management Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





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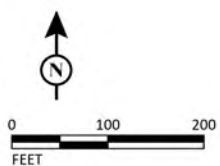
Project Site

#### Vegetation

- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal

#### Impacts

- Permanent
- Temporary



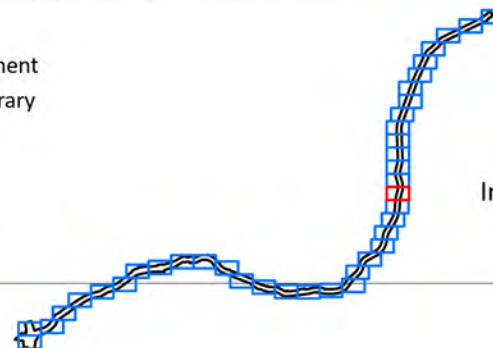
SOURCE: Google (2024); Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 5  
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### SR-74 Multi-Asset Management Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
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Project Site

#### Vegetation

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal

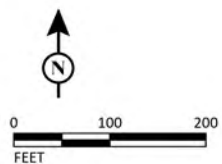
#### Impacts

- Permanent
- Temporary

FIGURE 5  
Sheet 26 of 39

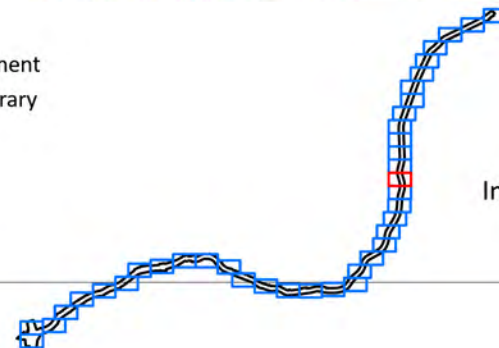
### SR-74 Multi-Asset Management Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



SOURCE: Google (2024); Nearmap (5/7/2025)

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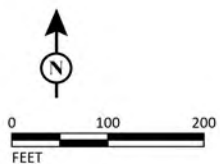
Project Site

Vegetation

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal

Impacts

- Temporary



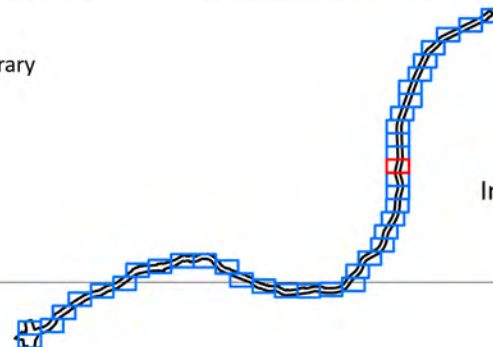
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I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 5  
Sheet 27 of 39

SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





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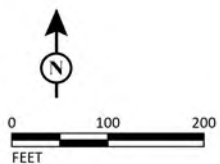
Project Site

Vegetation

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Ruderal

Impacts

- Temporary



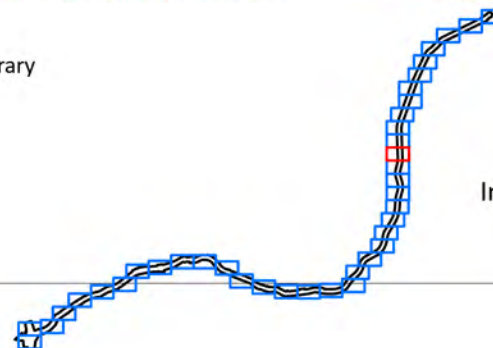
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I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 5  
Sheet 28 of 39

SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
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Project Site

Vegetation

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal

Impacts

- Temporary



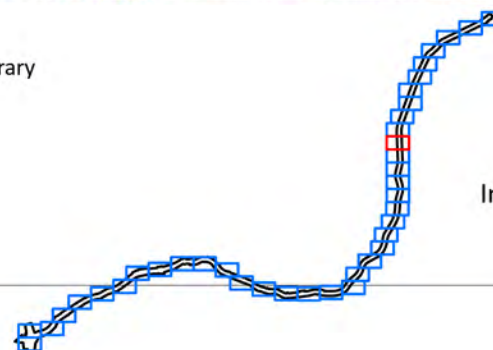
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FIGURE 5  
Sheet 29 of 39

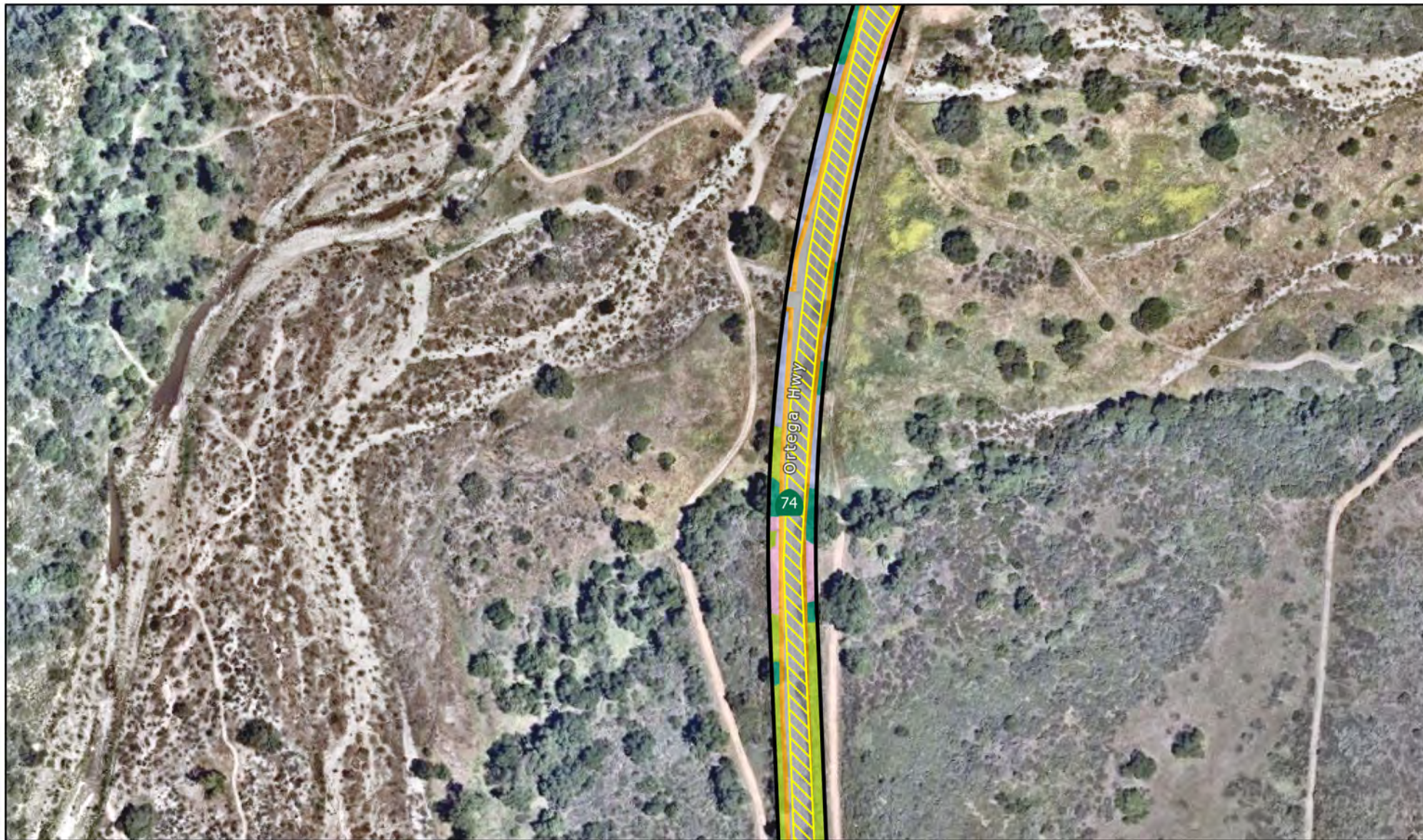
SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
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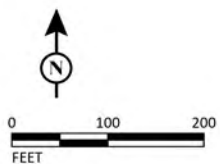
Project Site

#### Vegetation

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal

#### Impacts

- Temporary



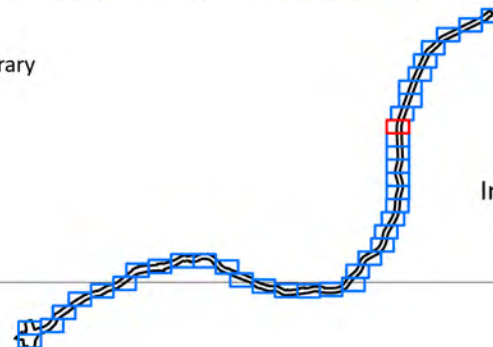
SOURCE: Google (2024); Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 5  
Sheet 30 of 39

### SR-74 Multi-Asset Management Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
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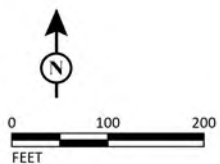
Project Site

Vegetation

- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal

Impacts

- Temporary



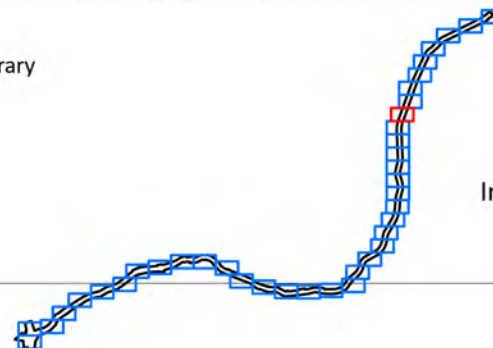
SOURCE: Google (2024); Nearmap (5/7/2025)

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FIGURE 5  
Sheet 31 of 39

SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





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Project Site

Vegetation

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal

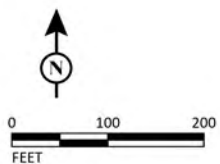
Impacts

- Temporary

FIGURE 5  
Sheet 32 of 39

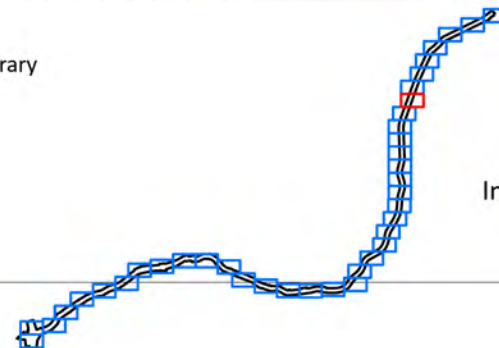
SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



SOURCE: Google (2024); Nearmap (5/7/2025)

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Project Site

Vegetation

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal

Impacts

- Temporary



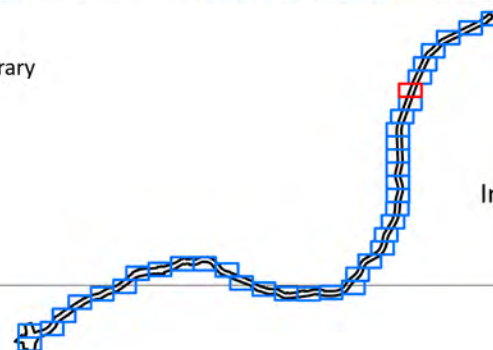
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I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 5  
Sheet 33 of 39

SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
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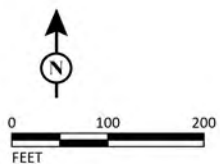
Project Site

Vegetation

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal

Impacts

- Temporary



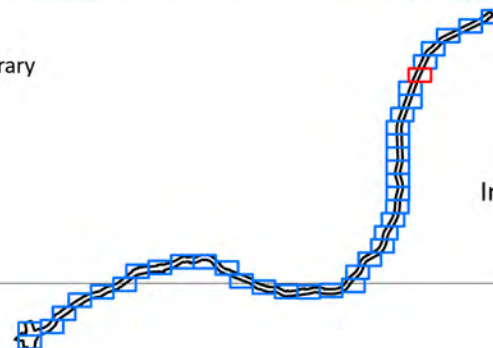
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FIGURE 5  
Sheet 34 of 39

SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





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Project Site

Vegetation

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal
- Southern cottonwood willow riparian

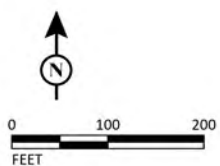
Impacts

- Temporary

FIGURE 5  
Sheet 35 of 39

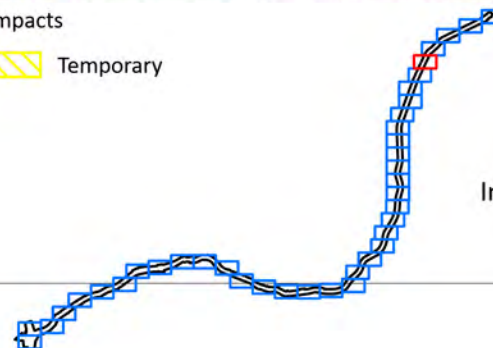
SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
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SOURCE: Google (2024); Nearmap (5/7/2025)

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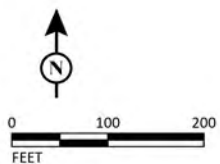
Project Site

Vegetation

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal
- Southern cottonwood willow riparian

Impacts

- Temporary



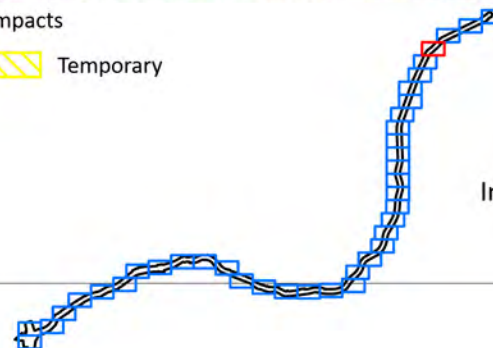
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FIGURE 5  
Sheet 36 of 39

SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
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Project Site

Vegetation

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal

Impacts

- Temporary



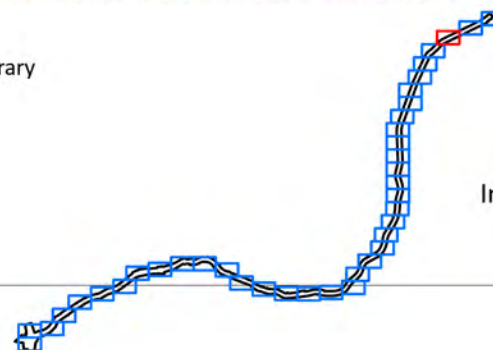
SOURCE: Google (2024); Nearmap (5/7/2025)

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FIGURE 5  
Sheet 37 of 39

SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
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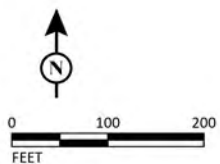
Project Site

#### Vegetation

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal

#### Impacts

- Temporary



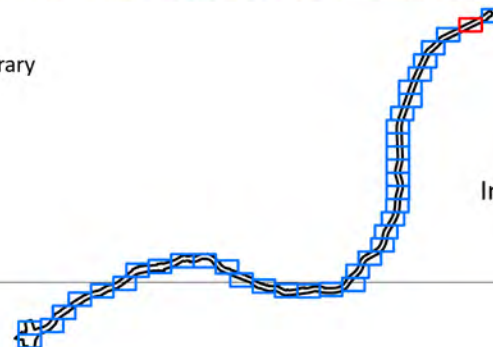
SOURCE: Google (2024); Nearmap (5/7/2025)

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FIGURE 5  
Sheet 38 of 39

### SR-74 Multi-Asset Management Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
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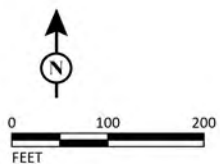




Project Site

Vegetation

- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal



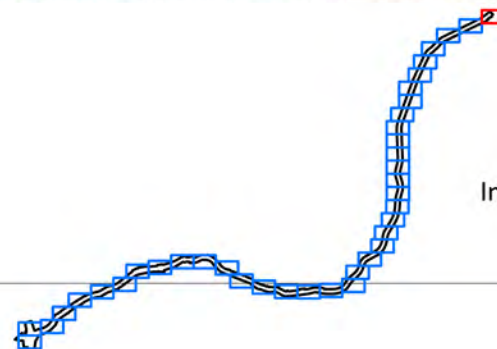
SOURCE: Google (2024); Nearmap (5/7/2025)

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FIGURE 5  
Sheet 39 of 39

SR-74 Multi-Asset Management  
Impacts to Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





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- Project Site
- Permanent Impact
- Temporary Impact
- Non-jurisdictional Underground Feature
- Culvert

- Jurisdictional Features
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters

FIGURE 6



SOURCE: Google (2024); Nearmap (5/7/2025)

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*SR-74 Multi-Asset Management*  
Impacts to Jurisdictional Features

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## **Appendix B:** Federal and State Lists of Sensitive Species



# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Orange County, California



## Local office

Carlsbad Fish And Wildlife Office

☎ (760) 431-9440

📠 (760) 431-5901

2177 Salk Avenue - Suite 250

NOT FOR CONSULTATION



# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

- 
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
  2. [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.

The following species are potentially affected by activities in this location:

## Mammals

NAME	STATUS
Pacific Pocket Mouse <i>Perognathus longimembris pacificus</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/8080">https://ecos.fws.gov/ecp/species/8080</a>	Endangered

## Birds

NAME	STATUS
California Least Tern <i>Sternula antillarum browni</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/8104">https://ecos.fws.gov/ecp/species/8104</a>	Endangered
California Spotted Owl <i>Strix occidentalis occidentalis</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/7266">https://ecos.fws.gov/ecp/species/7266</a>	Proposed Endangered
Coastal California Gnatcatcher <i>Poliophtila californica californica</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/8178">https://ecos.fws.gov/ecp/species/8178</a>	Threatened
Least Bell's Vireo <i>Vireo bellii pusillus</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/5945">https://ecos.fws.gov/ecp/species/5945</a>	Endangered
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/6749">https://ecos.fws.gov/ecp/species/6749</a>	Endangered

## Reptiles



NAME	STATUS
Southwestern Pond Turtle <i>Actinemys pallida</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/4768">https://ecos.fws.gov/ecp/species/4768</a>	Proposed Threatened

## Amphibians

NAME	STATUS
Arroyo (=arroyo Southwestern) Toad <i>Anaxyrus californicus</i> Wherever found There is <b>final</b> critical habitat for this species. Your location overlaps the critical habitat. <a href="https://ecos.fws.gov/ecp/species/3762">https://ecos.fws.gov/ecp/species/3762</a>	Endangered
Western Spadefoot <i>Spea hammondi</i> No critical habitat has been designated for this species.	Proposed Threatened

## Fishes

NAME	STATUS
Tidewater Goby <i>Eucyclogobius newberryi</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/57">https://ecos.fws.gov/ecp/species/57</a>	Endangered

## Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Proposed Threatened
Quino Checkerspot Butterfly <i>Euphydryas editha quino</i> (=E. e. wrighti) Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/5900">https://ecos.fws.gov/ecp/species/5900</a>	Endangered

# Crustaceans

NAME	STATUS
Riverside Fairy Shrimp <i>Streptocephalus woottoni</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/8148">https://ecos.fws.gov/ecp/species/8148</a>	Endangered
San Diego Fairy Shrimp <i>Branchinecta sandiegonensis</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/6945">https://ecos.fws.gov/ecp/species/6945</a>	Endangered

# Flowering Plants

NAME	STATUS
Nevin's Barberry <i>Berberis nevinii</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/8025">https://ecos.fws.gov/ecp/species/8025</a>	Endangered
Thread-leaved Brodiaea <i>Brodiaea filifolia</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/6087">https://ecos.fws.gov/ecp/species/6087</a>	Threatened

# Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

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



# Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act <sup>2</sup> and the Migratory Bird Treaty Act (MBTA) <sup>1</sup>. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their nests, should follow appropriate regulations and implement required avoidance and minimization measures, as described in the various links on this page.

The [data](#) in this location indicates that no eagles have been observed in this area. This does not mean eagles are not present in your project area, especially if the area is difficult to survey. Please review the 'Steps to Take When No Results Are Returned' section of the [Supplemental Information on Migratory Birds and Eagles document](#) to determine if your project is in a poorly surveyed area. If it is, you may need to rely on other resources to determine if eagles may be present (e.g. your local FWS field office, state surveys, your own surveys).

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds  
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds  
<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC  
<https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

Bald and Golden Eagle information is not available at this time

## Bald & Golden Eagles FAQs

**What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?**

The potential for eagle presence is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle ([Bald and Golden Eagle Protection Act](#) requirements may apply).

**Proper interpretation and use of your eagle report**

On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

### **How do I know if eagles are breeding, wintering, or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the [RAIL Tool](#) and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### **Interpreting the Probability of Presence Graphs**

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

#### ***How is the probability of presence score calculated? The calculation is done in three steps:***

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

### **Breeding Season ()**

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### **Survey Effort ()**

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

### **No Data ()**

A week is marked as having no data if there were no survey events for that week.

### **Survey Timeframe**



Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

# Migratory birds

The Migratory Bird Treaty Act (MBTA) <sup>1</sup> prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior [authorization](#) by the Department of Interior U.S. Fish and Wildlife Service (FWS).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds  
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC  
<https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

Migratory bird information is not available at this time

## Migratory Bird FAQs

**Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Avoidance & Minimization Measures for Birds](#) describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?**

The Migratory Bird Resource List is comprised of [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the [Bald and Golden Eagle Protection Act](#) and those species marked as “Vulnerable”. See the FAQ “What are the

levels of concern for migratory birds?" for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle ([Bald and Golden Eagle Protection Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

### **Why are subspecies showing up on my list?**

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

### **What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### **How do I know if a bird is breeding, wintering, or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the [RAIL Tool](#) and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### **What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and



3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Bald and Golden Eagle Protection Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ "Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

### **Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

### **Proper interpretation and use of your migratory bird report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

### **Interpreting the Probability of Presence Graphs**

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

#### ***How is the probability of presence score calculated? The calculation is done in three steps:***

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

#### **Breeding Season ()**

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

#### **Survey Effort ()**

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

#### **No Data ()**

A week is marked as having no data if there were no survey events for that week.

#### **Survey Timeframe**

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

## Facilities

### National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

### Fish hatcheries

There are no fish hatcheries at this location.



# Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

## Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

### Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in



## 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



In Reply Refer To:

11/14/2025 22:33:12 UTC

Project Code: 2026-0016148

Project Name: SR-74 Multi-Asset Management 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, proposed and candidate species, as well as proposed and final designated critical habitat, 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 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 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 at the Fish and Wildlife Service's Endangered Species Consultation website at:

<https://www.fws.gov/service/esa-section-7-consultation>

**Migratory Birds:** In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

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 Code 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

Project Code: 2026-0016148

Project Name: SR-74 Multi-Asset Management Project

Project Type: Road/Hwy - Maintenance/Modification

Project Description: The SR-74 multi-asset management project is located along SR-74 from SR-74/I-5 separation (PM 0.0) to 1.0-mile east of San Juan Creek (PM 11.5), in Orange County, including the city of San Juan Capistrano and an unincorporated area of Orange County. The project proposes to address a range of improvements, including roadway, traffic safety devices, complete street elements, and drainage systems.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@33.541852000000006,-117.5487320423971,14z>



Counties: Orange County, California

## ENDANGERED SPECIES ACT SPECIES

There is a total of 16 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 Fisheries<sup>1</sup>, 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.

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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.



## MAMMALS

NAME	STATUS
Pacific Pocket Mouse <i>Perognathus longimembris pacificus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8080">https://ecos.fws.gov/ecp/species/8080</a>	Endangered

## BIRDS

NAME	STATUS
California Least Tern <i>Sternula antillarum browni</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/8104">https://ecos.fws.gov/ecp/species/8104</a>	Endangered
California Spotted Owl <i>Strix occidentalis occidentalis</i> Population: Coastal-Southern California No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/7266">https://ecos.fws.gov/ecp/species/7266</a>	Proposed Endangered
Coastal California Gnatcatcher <i>Polioptila californica californica</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8178">https://ecos.fws.gov/ecp/species/8178</a>	Threatened
Least Bell's Vireo <i>Vireo bellii pusillus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5945">https://ecos.fws.gov/ecp/species/5945</a>	Endangered
Southwestern Willow Flycatcher <i>Empidonax traillii extimus</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6749">https://ecos.fws.gov/ecp/species/6749</a>	Endangered

## REPTILES

NAME	STATUS
Southwestern Pond Turtle <i>Actinemys pallida</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/4768">https://ecos.fws.gov/ecp/species/4768</a>	Proposed Threatened

## AMPHIBIANS

NAME	STATUS
Arroyo (=arroyo Southwestern) Toad <i>Anaxyrus californicus</i> There is <b>final</b> critical habitat for this species. Your location overlaps the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/3762">https://ecos.fws.gov/ecp/species/3762</a>	Endangered
Western Spadefoot <i>Spea hammondi</i> Population: Southern DPS No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/5425">https://ecos.fws.gov/ecp/species/5425</a>	Proposed Threatened

## FISHES

NAME	STATUS
Tidewater Goby <i>Eucyclogobius newberryi</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/57">https://ecos.fws.gov/ecp/species/57</a>	Endangered

## INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Proposed Threatened
Quino Checkerspot Butterfly <i>Euphydryas editha quino</i> (= <i>E. e. wrighti</i> ) There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5900">https://ecos.fws.gov/ecp/species/5900</a>	Endangered

## CRUSTACEANS

NAME	STATUS
Riverside Fairy Shrimp <i>Streptocephalus woottoni</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8148">https://ecos.fws.gov/ecp/species/8148</a>	Endangered
San Diego Fairy Shrimp <i>Branchinecta sandiegonensis</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6945">https://ecos.fws.gov/ecp/species/6945</a>	Endangered

## FLOWERING PLANTS

NAME	STATUS
Nevin's Barberry <i>Berberis nevinii</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/8025">https://ecos.fws.gov/ecp/species/8025</a>	Endangered
Thread-leaved Brodiaea <i>Brodiaea filifolia</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/6087">https://ecos.fws.gov/ecp/species/6087</a>	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> <a href="https://ecos.fws.gov/ecp/species/3762#crithab">https://ecos.fws.gov/ecp/species/3762#crithab</a>	Final



## **IPAC USER CONTACT INFORMATION**

Agency: California Department of Transportation District 12  
Name: Carla Cervantes  
Address: 3210 El Camino Real  
Address Line 2: Ste. 100  
City: Irvine  
State: CA  
Zip: 92602  
Email: carla.cervantes@lsa.net  
Phone: 9096781357

## **LEAD AGENCY CONTACT INFORMATION**

Lead Agency: California Department of Transportation District 12

activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION





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**Federal ESA - - NOAA Fisheries Species List Re: Caltrans SR-74 Multi-Asset Management Project**

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**From** NMFS SpeciesList - NOAA Service Account <nmfs.wcrca.specieslist@noaa.gov>

**Date** Mon 9/8/2025 1:16 PM

**To** Carla Cervantes <Carla.Cervantes@lsa.net>

Please retain a copy of each email request that you send to NOAA at [nmfs.wcrca.specieslist@noaa.gov](mailto:nmfs.wcrca.specieslist@noaa.gov) as proof of your official Endangered Species Act SPECIES LIST. The email you send to NOAA should include the following information: your first and last name; email address; phone number; federal agency name (or delegated state agency such as Caltrans); mailing address; project title; brief description of the project; and a copy of a list of threatened or endangered species identified within specified geographic areas derived from the NOAA Fisheries, West Coast Region, California Species List Tool. You may only receive this instruction once per week. If you have questions, contact your local NOAA Fisheries liaison.



## Caltrans SR-74 Multi-Asset Management Project

**From** Carla Cervantes <Carla.Cervantes@lsa.net>

**Date** Mon 9/8/2025 1:16 PM

**To** NMFS SpeciesList - NOAA Service Account <nmfs.wcrca.specieslist@noaa.gov>

Hello,

This email contains the search results generated from the NOAA Fisheries California Species List Tool for the El Toro, Black Star Canyon, Orange, and Tustin, California 7.5-minute topographic quadrangles. This species list was generated for the Caltrans SR-74 Multi-Asset Management Project located along State Route 74 (SR-74) from the SR-74/Interstate 5 (I-5) Separation (PM 0.0) to 1.0-mile East of San Juan Creek (PM 11.5) within Orange County, California.

**Quad Name El Toro**

**Quad Number 33117-F6**

### **ESA Anadromous Fish**

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) -

SRWR Chinook Salmon ESU (E) -

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) - **X**

CCV Steelhead DPS (T) -

Eulachon (T) -

sDPS Green Sturgeon (T) -

### **ESA Anadromous Fish Critical Habitat**

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat -

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat -

### **ESA Marine Invertebrates**

Range Black Abalone (E) -



Range White Abalone (E) -

**ESA Marine Invertebrates Critical Habitat**

Black Abalone Critical Habitat -

**ESA Sea Turtles**

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -

North Pacific Loggerhead Sea Turtle (E) -

**ESA Whales**

Blue Whale (E) -

Fin Whale (E) -

Humpback Whale (E) -

Southern Resident Killer Whale (E) -

North Pacific Right Whale (E) -

Sei Whale (E) -

Sperm Whale (E) -

**ESA Pinnipeds**

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

**Essential Fish Habitat**

Coho EFH -

Chinook Salmon EFH -

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

**MMPA Species (See list at left)**

**ESA and MMPA Cetaceans/Pinnipeds**

**See list at left and consult the NMFS Long Beach office**

**562-980-4000**

MMPA Cetaceans -

MMPA Pinnipeds -

Quad Name **Santiago Peak**

Quad Number **33117-F5**

**ESA Anadromous Fish**

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) -

SRWR Chinook Salmon ESU (E) -

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) - **X**

CCV Steelhead DPS (T) -

Eulachon (T) -

sDPS Green Sturgeon (T) -

**ESA Anadromous Fish Critical Habitat**

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat -

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat -

**ESA Marine Invertebrates**

Range Black Abalone (E) -

Range White Abalone (E) -

**ESA Marine Invertebrates Critical Habitat**

Black Abalone Critical Habitat -

**ESA Sea Turtles**

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -

North Pacific Loggerhead Sea Turtle (E) -

**ESA Whales**

Blue Whale (E) -

Fin Whale (E) -

Humpback Whale (E) -

Southern Resident Killer Whale (E) -

North Pacific Right Whale (E) -

Sei Whale (E) -

Sperm Whale (E) -

**ESA Pinnipeds**

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

**Essential Fish Habitat**

Coho EFH -

Chinook Salmon EFH -

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

**MMPA Species (See list at left)**

**ESA and MMPA Cetaceans/Pinnipeds**

**See list at left and consult the NMFS Long Beach office**

**562-980-4000**

MMPA Cetaceans -

MMPA Pinnipeds -



Quad  
Name **Alberhill**

Quad  
Number **33117-F4**

**ESA Anadromous Fish**

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) -

SRWR Chinook Salmon ESU (E) -

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) - **X**

CCV Steelhead DPS (T) -

Eulachon (T) -

sDPS Green Sturgeon (T) -

**ESA Anadromous Fish Critical Habitat**

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat -

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat -

**ESA Marine Invertebrates**

Range Black Abalone (E) -

Range White Abalone (E) -

**ESA Marine Invertebrates Critical Habitat**

Black Abalone Critical Habitat -

**ESA Sea Turtles**

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -

North Pacific Loggerhead Sea Turtle (E) -

**ESA Whales**

Blue Whale (E) -

Fin Whale (E) -

Humpback Whale (E) -

Southern Resident Killer Whale (E) -

North Pacific Right Whale (E) -

Sei Whale (E) -

Sperm Whale (E) -

**ESA Pinnipeds**

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

**Essential Fish Habitat**

Coho EFH -

Chinook Salmon EFH -

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

**MMPA Species (See list at left)****ESA and MMPA Cetaceans/Pinnipeds**

**See list at left and consult the NMFS Long Beach office**

**562-980-4000**

MMPA Cetaceans -

MMPA Pinnipeds -

Quad Name **Sitton Peak**

Quad Number **33117-E4**

**ESA Anadromous Fish**

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) -

SRWR Chinook Salmon ESU (E) -

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) - **X**

CCV Steelhead DPS (T) -

Eulachon (T) -

sDPS Green Sturgeon (T) -

**ESA Anadromous Fish Critical Habitat**

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat -

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat -

**ESA Marine Invertebrates**

Range Black Abalone (E) -



Range White Abalone (E) -

**ESA Marine Invertebrates Critical Habitat**

Black Abalone Critical Habitat -

**ESA Sea Turtles**

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -

North Pacific Loggerhead Sea Turtle (E) -

**ESA Whales**

Blue Whale (E) -

Fin Whale (E) -

Humpback Whale (E) -

Southern Resident Killer Whale (E) -

North Pacific Right Whale (E) -

Sei Whale (E) -

Sperm Whale (E) -

**ESA Pinnipeds**

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

**Essential Fish Habitat**

Coho EFH -

Chinook Salmon EFH -

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

**MMPA Species (See list at left)**

**ESA and MMPA Cetaceans/Pinnipeds**

**See list at left and consult the NMFS Long Beach office**

**562-980-4000**

MMPA Cetaceans -

MMPA Pinnipeds -

Quad Name **Canada Gobernadora \***

Quad Number **33117-E5**

**ESA Anadromous Fish**

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) -

SRWR Chinook Salmon ESU (E) -

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) - **X**

CCV Steelhead DPS (T) -

Eulachon (T) -

sDPS Green Sturgeon (T) -

**ESA Anadromous Fish Critical Habitat**

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat -

CCV Steelhead Critical Habitat -

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat -

**ESA Marine Invertebrates**

Range Black Abalone (E) -

Range White Abalone (E) -

**ESA Marine Invertebrates Critical Habitat**

Black Abalone Critical Habitat -

**ESA Sea Turtles**

East Pacific Green Sea Turtle (T) -

Olive Ridley Sea Turtle (T/E) -

Leatherback Sea Turtle (E) -

North Pacific Loggerhead Sea Turtle (E) -

**ESA Whales**

Blue Whale (E) -

Fin Whale (E) -

Humpback Whale (E) -

Southern Resident Killer Whale (E) -

North Pacific Right Whale (E) -

Sei Whale (E) -

Sperm Whale (E) -

**ESA Pinnipeds**

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

**Essential Fish Habitat**

Coho EFH -

Chinook Salmon EFH -

Groundfish EFH -

Coastal Pelagics EFH -

Highly Migratory Species EFH -

**MMPA Species (See list at left)**

**ESA and MMPA Cetaceans/Pinnipeds**

**See list at left and consult the NMFS Long Beach office**

**562-980-4000**

MMPA Cetaceans -

MMPA Pinnipeds -



Quad Name **San Juan Capistrano**

Quad Number **33117-E6**

**ESA Anadromous Fish**

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) -

SRWR Chinook Salmon ESU (E) -

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) - **X**

CCV Steelhead DPS (T) -

Eulachon (T) -

sDPS Green Sturgeon (T) - **X**

**ESA Anadromous Fish Critical Habitat**

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat - **X**

CCV Steelhead Critical Habitat -

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat -

**ESA Marine Invertebrates**

Range Black Abalone (E) - **X**

Range White Abalone (E) - **X**

**ESA Marine Invertebrates Critical Habitat**

Black Abalone Critical Habitat -

**ESA Sea Turtles**

East Pacific Green Sea Turtle (T) - **X**

Olive Ridley Sea Turtle (T/E) - **X**

Leatherback Sea Turtle (E) - **X**

North Pacific Loggerhead Sea Turtle (E) - **X**

**ESA Whales**

Blue Whale (E) - **X**

Fin Whale (E) - **X**

Humpback Whale (E) - **X**

Southern Resident Killer Whale (E) - **X**

North Pacific Right Whale (E) - **X**

Sei Whale (E) - **X**

Sperm Whale (E) - **X**

**ESA Pinnipeds**

Guadalupe Fur Seal (T) - **X**

Steller Sea Lion Critical Habitat -

**Essential Fish Habitat**

Coho EFH -

Chinook Salmon EFH -

Groundfish EFH - **X**

Coastal Pelagics EFH - **X**

Highly Migratory Species EFH - **X**

**MMPA Species (See list at left)**

**ESA and MMPA Cetaceans/Pinnipeds**

**See list at left and consult the NMFS Long Beach office  
562-980-4000**

MMPA Cetaceans - **X**

MMPA Pinnipeds - **X**

Quad Name **Dana Point**

Quad Number **33117-D6**

**ESA Anadromous Fish**

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) -

SRWR Chinook Salmon ESU (E) -

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) - **X**

CCV Steelhead DPS (T) -

Eulachon (T) -

sDPS Green Sturgeon (T) - **X**

**ESA Anadromous Fish Critical Habitat**

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat - **X**

CCV Steelhead Critical Habitat -



Eulachon Critical Habitat -  
 sDPS Green Sturgeon Critical Habitat -

### **ESA Marine Invertebrates**

Range Black Abalone (E) - **X**  
 Range White Abalone (E) - **X**

### **ESA Marine Invertebrates Critical Habitat**

Black Abalone Critical Habitat -

### **ESA Sea Turtles**

East Pacific Green Sea Turtle (T) - **X**  
 Olive Ridley Sea Turtle (T/E) - **X**  
 Leatherback Sea Turtle (E) - **X**  
 North Pacific Loggerhead Sea Turtle (E) - **X**

### **ESA Whales**

Blue Whale (E) - **X**  
 Fin Whale (E) - **X**  
 Humpback Whale (E) - **X**  
 Southern Resident Killer Whale (E) - **X**  
 North Pacific Right Whale (E) - **X**  
 Sei Whale (E) - **X**  
 Sperm Whale (E) - **X**

### **ESA Pinnipeds**

Guadalupe Fur Seal (T) - **X**

Steller Sea Lion Critical Habitat -

### **Essential Fish Habitat**

Coho EFH -  
 Chinook Salmon EFH -  
 Groundfish EFH - **X**  
 Coastal Pelagics EFH - **X**  
 Highly Migratory Species EFH - **X**

### **MMPA Species (See list at left)**

### **ESA and MMPA Cetaceans/Pinnipeds**

**See list at left and consult the NMFS Long Beach office  
 562-980-4000**

MMPA Cetaceans - **X**

MMPA Pinnipeds - **X**

Quad Name **San Clemente**

Quad Number **33117-D5**

### **ESA Anadromous Fish**

SONCC Coho ESU (T) -  
 CCC Coho ESU (E) -  
 CC Chinook Salmon ESU (T) -  
 CVSR Chinook Salmon ESU (T) -

SRWR Chinook Salmon ESU (E) -  
 NC Steelhead DPS (T) -  
 CCC Steelhead DPS (T) -  
 SCCC Steelhead DPS (T) -  
 SC Steelhead DPS (E) - **X**  
 CCV Steelhead DPS (T) -  
 Eulachon (T) -  
 sDPS Green Sturgeon (T) - **X**

### **ESA Anadromous Fish Critical Habitat**

SONCC Coho Critical Habitat -  
 CCC Coho Critical Habitat -  
 CC Chinook Salmon Critical Habitat -  
 CVSR Chinook Salmon Critical Habitat -  
 SRWR Chinook Salmon Critical Habitat -  
 NC Steelhead Critical Habitat -  
 CCC Steelhead Critical Habitat -  
 SCCC Steelhead Critical Habitat -  
 SC Steelhead Critical Habitat - **X**  
 CCV Steelhead Critical Habitat -  
 Eulachon Critical Habitat -  
 sDPS Green Sturgeon Critical Habitat -

### **ESA Marine Invertebrates**

Range Black Abalone (E) - **X**  
 Range White Abalone (E) - **X**

### **ESA Marine Invertebrates Critical Habitat**

Black Abalone Critical Habitat -

### **ESA Sea Turtles**

East Pacific Green Sea Turtle (T) - **X**  
 Olive Ridley Sea Turtle (T/E) - **X**  
 Leatherback Sea Turtle (E) - **X**  
 North Pacific Loggerhead Sea Turtle (E) - **X**

### **ESA Whales**

Blue Whale (E) - **X**  
 Fin Whale (E) - **X**  
 Humpback Whale (E) - **X**  
 Southern Resident Killer Whale (E) - **X**  
 North Pacific Right Whale (E) - **X**  
 Sei Whale (E) - **X**  
 Sperm Whale (E) - **X**

### **ESA Pinnipeds**

Guadalupe Fur Seal (T) - **X**

Steller Sea Lion Critical Habitat -

### **Essential Fish Habitat**

Coho EFH -  
 Chinook Salmon EFH -



Groundfish EFH - **X**

Coastal Pelagics EFH - **X**

Highly Migratory Species EFH - **X**

**MMPA Species (See list at left)**

**ESA and MMPA Cetaceans/Pinnipeds**

**See list at left and consult the NMFS Long Beach office  
562-980-4000**

MMPA Cetaceans - **X**

MMPA Pinnipeds - **X**

Quad **Margarita Peak**

Name

Quad  
Number **33117-D4**

**ESA Anadromous Fish**

SONCC Coho ESU (T) -

CCC Coho ESU (E) -

CC Chinook Salmon ESU (T) -

CVSR Chinook Salmon ESU (T) -

SRWR Chinook Salmon ESU (E) -

NC Steelhead DPS (T) -

CCC Steelhead DPS (T) -

SCCC Steelhead DPS (T) -

SC Steelhead DPS (E) - **X**

CCV Steelhead DPS (T) -

Eulachon (T) -

sDPS Green Sturgeon (T) -

**ESA Anadromous Fish Critical Habitat**

SONCC Coho Critical Habitat -

CCC Coho Critical Habitat -

CC Chinook Salmon Critical Habitat -

CVSR Chinook Salmon Critical Habitat -

SRWR Chinook Salmon Critical Habitat -

NC Steelhead Critical Habitat -

CCC Steelhead Critical Habitat -

SCCC Steelhead Critical Habitat -

SC Steelhead Critical Habitat - **X**

CCV Steelhead Critical Habitat -

Eulachon Critical Habitat -

sDPS Green Sturgeon Critical Habitat -

**ESA Marine Invertebrates**

Range Black Abalone (E) -

Range White Abalone (E) -

**ESA Marine Invertebrates Critical Habitat**

Black Abalone Critical Habitat -

**ESA Sea Turtles**

East Pacific Green Sea Turtle (T) -  
Olive Ridley Sea Turtle (T/E) -  
Leatherback Sea Turtle (E) -  
North Pacific Loggerhead Sea Turtle (E) -

**ESA Whales**

Blue Whale (E) -  
Fin Whale (E) -  
Humpback Whale (E) -  
Southern Resident Killer Whale (E) -  
North Pacific Right Whale (E) -  
Sei Whale (E) -  
Sperm Whale (E) -

**ESA Pinnipeds**

Guadalupe Fur Seal (T) -

Steller Sea Lion Critical Habitat -

**Essential Fish Habitat**

Coho EFH -  
Chinook Salmon EFH -  
Groundfish EFH -  
Coastal Pelagics EFH -  
Highly Migratory Species EFH -

**MMPA Species (See list at left)**

**ESA and MMPA Cetaceans/Pinnipeds**

**See list at left and consult the NMFS Long Beach office**

**562-980-4000**

MMPA Cetaceans -  
MMPA Pinnipeds -

Carla Cervantes | Biologist | [LSA](#)



# Selected Elements by Scientific Name

## California Department of Fish and Wildlife

### California Natural Diversity Database



**Query Criteria:** Quad<span style='color:Red'> IS </span>(El Toro (3311766)<span style='color:Red'> OR </span>Santiago Peak (3311765)<span style='color:Red'> OR </span>Alberhill (3311764)<span style='color:Red'> OR </span>Sitton Peak (3311754)<span style='color:Red'> OR </span>Canada Gobernadora (3311755)<span style='color:Red'> OR </span>San Juan Capistrano (3311756)<span style='color:Red'> OR </span>Dana Point (3311746)<span style='color:Red'> OR </span>San Clemente (3311745)<span style='color:Red'> OR </span>Margarita Peak (3311744))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
<b><i>Abronia villosa var. aurita</i></b> chaparral sand-verbena	PDNYC010P1	None	None	G5T2?	S2	1B.1
<b><i>Accipiter cooperii</i></b> Cooper's hawk	ABNKC12040	None	None	G5	S4	WL
<b><i>Actinemys pallida</i></b> southwestern pond turtle	ARAAD02032	Proposed Threatened	None	G2G3	SNR	SSC
<b><i>Agelaius tricolor</i></b> tricolored blackbird	ABPBXB0020	None	Threatened	G1G2	S2	SSC
<b><i>Aimophila ruficeps canescens</i></b> southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S4	WL
<b><i>Aldama purissima</i></b> La Purisima aldama	PDAST9T0S0	None	None	G4	S1	2B.3
<b><i>Allium marvinii</i></b> Yucaipa onion	PMLIL02330	None	None	G1	S2	1B.2
<b><i>Allium munzii</i></b> Munz's onion	PMLIL022Z0	Endangered	Threatened	G1	S1	1B.1
<b><i>Ambrosia pumila</i></b> San Diego ambrosia	PDAST0C0M0	Endangered	None	G1	S1	1B.1
<b><i>Ammodramus savannarum</i></b> grasshopper sparrow	ABPBXA0020	None	None	G5	S3	SSC
<b><i>Anaxyrus californicus</i></b> arroyo toad	AAABB01230	Endangered	None	G1G2	S2	SSC
<b><i>Anniella stebbinsi</i></b> Southern California legless lizard	ARACC01060	None	None	G3	S3	SSC
<b><i>Antrozous pallidus</i></b> pallid bat	AMACC10010	None	None	G4	S3	SSC
<b><i>Aphanisma blitoides</i></b> aphanisma	PDCHE02010	None	None	G3G4	S2	1B.2
<b><i>Aquila chrysaetos</i></b> golden eagle	ABNKC22010	None	None	G5	S3	FP
<b><i>Arctostaphylos rainbowensis</i></b> Rainbow manzanita	PDERI042T0	None	None	G2G3	S2S3	1B.1
<b><i>Arizona elegans occidentalis</i></b> California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
<b><i>Asio otus</i></b> long-eared owl	ABNSB13010	None	None	G5	S3?	SSC





Selected Elements by Scientific 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
<b><i>Aspidoscelis hyperythra</i></b> orange-throated whiptail	ARACJ02060	None	None	G5	S2S3	WL
<b><i>Aspidoscelis tigris stejnegeri</i></b> coastal whiptail	ARACJ02143	None	None	G5T5	S3	SSC
<b><i>Astragalus brauntonii</i></b> Braunton's milk-vetch	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
<b><i>Athene cunicularia</i></b> burrowing owl	ABNSB10010	None	Candidate Endangered	G4	S2	SSC
<b><i>Atriplex coulteri</i></b> Coulter's saltbush	PDCHE040E0	None	None	G3	S2	1B.2
<b><i>Atriplex pacifica</i></b> south coast saltscale	PDCHE041C0	None	None	G4	S2	1B.2
<b><i>Baccharis vanessae</i></b> Encinitas baccharis	PDAST0W0P0	Threatened	Endangered	G1	S1	1B.1
<b><i>Bombus crotchii</i></b> Crotch's bumble bee	IIHYM24480	None	Candidate Endangered	G2	S2	
<b><i>Bombus pensylvanicus</i></b> American bumble bee	IIHYM24260	None	None	G3G4	S2	
<b><i>Branchinecta sandiegonensis</i></b> San Diego fairy shrimp	ICBRA03060	Endangered	None	G2	S1	
<b><i>Brodiaea filifolia</i></b> thread-leaved brodiaea	PMLIL0C050	Threatened	Endangered	G2	S2	1B.1
<b><i>Brodiaea orcuttii</i></b> Orcutt's brodiaea	PMLIL0C0B0	None	None	G2	S2	1B.1
<b><i>Brodiaea santarosae</i></b> Santa Rosa Basalt brodiaea	PMLIL0C0G0	None	None	G1	S1	1B.2
<b><i>Buteo regalis</i></b> ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
<b><i>Calochortus weedii</i> var. <i>intermedius</i></b> intermediate mariposa-lily	PMLIL0D1J1	None	None	G3G4T3	S3	1B.2
<b><i>Campylorhynchus brunneicapillus sandiegonensis</i></b> coastal cactus wren	ABPBG02095	None	None	G5T3Q	S2	SSC
<b><i>Canyon Live Oak Ravine Forest</i></b> Canyon Live Oak Ravine Forest	CTT61350CA	None	None	G3	S3.3	
<b><i>Ceanothus pendletonensis</i></b> Pendleton ceanothus	PDRHA04450	None	None	G1	S1	1B.2
<b><i>Centromadia parryi</i> ssp. <i>australis</i></b> southern tarplant	PDAST4R0P4	None	None	G3T2	S2	1B.1
<b><i>Centromadia pungens</i> ssp. <i>laevis</i></b> smooth tarplant	PDAST4R0R4	None	None	G3G4T2	S2	1B.1
<b><i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i></b> Orcutt's pincushion	PDAST20095	None	None	G5T1	S1	1B.1



Selected Elements by Scientific 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
<b><i>Chaetodipus californicus femoralis</i></b> Dulzura pocket mouse	AMAFD05021	None	None	G5T3	S3	
<b><i>Chaetodipus fallax fallax</i></b> northwestern San Diego pocket mouse	AMAFD05031	None	None	G5T3T4	S3S4	
<b><i>Charadrius nivosus nivosus</i></b> western snowy plover	ABNNB03031	Threatened	None	G3T3	S3	SSC
<b><i>Choeronycteris mexicana</i></b> Mexican long-tongued bat	AMACB02010	None	None	G3G4	S1	SSC
<b><i>Chorizanthe parryi var. parryi</i></b> Parry's spineflower	PDPGN040J2	None	None	G3T2	S2	1B.1
<b><i>Chorizanthe polygonoides var. longispina</i></b> long-spined spineflower	PDPGN040K1	None	None	G5T3	S3	1B.2
<b><i>Circus hudsonius</i></b> northern harrier	ABNKC11011	None	None	G5	S3	SSC
<b><i>Clinopodium chandleri</i></b> San Miguel savory	PDLAM08030	None	None	G2G3	S2	1B.2
<b><i>Coelus globosus</i></b> globose dune beetle	IICOL4A010	None	None	G1G2	S1S2	
<b><i>Coleonyx variegatus abbotti</i></b> San Diego banded gecko	ARACD01031	None	None	G5T5	S1S2	SSC
<b><i>Comarostaphylis diversifolia ssp. diversifolia</i></b> summer holly	PDERI0B011	None	None	G3T2	S2	1B.2
<b><i>Crotalus ruber</i></b> red-diamond rattlesnake	ARADE02090	None	None	G4	S3	SSC
<b><i>Danaus plexippus plexippus pop. 1</i></b> monarch - California overwintering population	IILEPP2012	Proposed Threatened	None	G4T1T2Q	S2	
<b><i>Diadophis punctatus similis</i></b> San Diego ringneck snake	ARADB1001A	None	None	G5T4	S2?	
<b><i>Dipodomys stephensi</i></b> Stephens' kangaroo rat	AMAFD03100	Threatened	Threatened	G2	S3	
<b><i>Dodecahema leptoceras</i></b> slender-horned spineflower	PDPGN0V010	Endangered	Endangered	G1	S1	1B.1
<b><i>Dudleya blochmaniae ssp. blochmaniae</i></b> Blochman's dudleya	PDCRA04051	None	None	G3T2	S2	1B.1
<b><i>Dudleya chasmophyta</i></b> Santiago Canyon dudleya	PDCRA04150	None	None	G1	S1	1B.1
<b><i>Dudleya multicaulis</i></b> many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2
<b><i>Dudleya stolonifera</i></b> Laguna Beach dudleya	PDCRA040P0	Threatened	Threatened	G1	S1	1B.1
<b><i>Dudleya viscida</i></b> sticky dudleya	PDCRA040T0	None	None	G2	S2	1B.2



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<b><i>Elanus leucurus</i></b> white-tailed kite	ABNKC06010	None	None	G5	S3S4	FP
<b><i>Empidonax traillii extimus</i></b> southwestern willow flycatcher	ABPAE33043	Endangered	Endangered	G5T2	S3	
<b><i>Eremophila alpestris actia</i></b> California horned lark	ABPAT02011	None	None	G5T4Q	S4	WL
<b><i>Eryngium pendletonense</i></b> Pendleton button-celery	PDAP10Z120	None	None	G1	S1	1B.1
<b><i>Eucyclogobius newberryi</i></b> tidewater goby	AFCQN04010	Endangered	None	G3	S3	SSC
<b><i>Eumops perotis californicus</i></b> western mastiff bat	AMACD02011	None	None	G4G5T4	S3S4	SSC
<b><i>Euphorbia misera</i></b> cliff spurge	PDEUP0Q1B0	None	None	G5	S2	2B.2
<b><i>Gila orcuttii</i></b> arroyo chub	AFCJB13120	None	None	G1	S2	SSC
<b><i>Harpagonella palmeri</i></b> Palmer's grapplinghook	PDBOR0H010	None	None	G4	S3	4.2
<b><i>Hesperocyparis forbesii</i></b> Tecate cypress	PGCUP040C0	None	None	G2	S2	1B.1
<b><i>Horkelia cuneata var. puberula</i></b> mesa horkelia	PDROS0W045	None	None	G4T1	S1	1B.1
<b><i>Horkelia truncata</i></b> Ramona horkelia	PDROS0W0G0	None	None	G3	S3	1B.3
<b><i>Icteria virens</i></b> yellow-breasted chat	ABPBX24010	None	None	G5	S4	SSC
<b><i>Imperata brevifolia</i></b> California satintail	PMPOA3D020	None	None	G3	S3	2B.1
<b><i>Isocoma menziesii var. decumbens</i></b> decumbent goldenbush	PDAST57091	None	None	G3G5T2T3	S2	1B.2
<b><i>Lasiurus frantzii</i></b> western red bat	AMACC05080	None	None	G4	S3	SSC
<b><i>Lasthenia glabrata ssp. coulteri</i></b> Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
<b><i>Lepechinia cardiophylla</i></b> heart-leaved pitcher sage	PDLAM0V020	None	None	G3	S2S3	1B.2
<b><i>Lepidium virginicum var. robinsonii</i></b> Robinson's pepper-grass	PDBRA1M114	None	None	G5T3	S3	4.3
<b><i>Lilium parryi</i></b> lemon lily	PMLIL1A0J0	None	None	G3	S3	1B.2
<b><i>Lycium brevipes var. hassei</i></b> Santa Catalina Island desert-thorn	PDSOL0G0N0	None	None	G5T1Q	S1	3.1





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<b><i>Monardella hypoleuca ssp. intermedia</i></b> intermediate monardella	PDLAM180A4	None	None	G4T2?	S2?	1B.3
<b><i>Monardella macrantha ssp. hallii</i></b> Hall's monardella	PDLAM180E1	None	None	G5T3	S3	1B.3
<b><i>Myosurus minimus ssp. apus</i></b> little mousetail	PDRAN0H031	None	None	G5T2Q	S2	3.1
<b><i>Myotis yumanensis</i></b> Yuma myotis	AMACC01020	None	None	G5	S4	
<b><i>Nama stenocarpa</i></b> mud nama	PDHYD0A0H0	None	None	G4G5	S1S2	2B.2
<b><i>Navarretia prostrata</i></b> prostrate vernal pool navarretia	PDPLM0C0Q0	None	None	G2	S2	1B.2
<b><i>Neotoma lepida intermedia</i></b> San Diego desert woodrat	AMAFF08041	None	None	G5T3T4	S3S4	SSC
<b><i>Nolina cismontana</i></b> chaparral nolina	PMAGA080E0	None	None	G3	S3	1B.2
<b><i>Nyctinomops femorosaccus</i></b> pocketed free-tailed bat	AMACD04010	None	None	G5	S3	SSC
<b><i>Oncorhynchus mykiss irideus pop. 10</i></b> steelhead - southern California DPS	AFCHA0209J	Endangered	Endangered	G5T1Q	S1	
<b><i>Onychomys torridus ramona</i></b> southern grasshopper mouse	AMAFF06022	None	None	G5T3	S3	SSC
<b><i>Pandion haliaetus</i></b> osprey	ABNKC01010	None	None	G5	S4	WL
<b><i>Pentachaeta aurea ssp. allenii</i></b> Allen's pentachaeta	PDAST6X021	None	None	G4T1	S1	1B.1
<b><i>Perognathus longimembris pacificus</i></b> Pacific pocket mouse	AMAFD01042	Endangered	None	G5T2	S2	SSC
<b><i>Phacelia keckii</i></b> Santiago Peak phacelia	PDHYD0C4G1	None	None	G1	S1	1B.3
<b><i>Phrynosoma blainvillii</i></b> coast horned lizard	ARACF12100	None	None	G4	S4	SSC
<b><i>Plegadis chihi</i></b> white-faced ibis	ABNGE02020	None	None	G5	S3S4	WL
<b><i>Plestiodon skiltonianus interparietalis</i></b> Coronado skink	ARACH01114	None	None	G5T5	S2S3	WL
<b><i>Polioptila californica californica</i></b> coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T3Q	S2	SSC
<b><i>Pseudognaphalium leucocephalum</i></b> white rabbit-tobacco	PDAST440C0	None	None	G4	S2	2B.2
<b><i>Quercus dumosa</i></b> Nuttall's scrub oak	PDFAG050D0	None	None	G3	S3	1B.1



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<b><i>Rhinichthys gabrielino</i></b> Santa Ana speckled dace	AFCJB3705K	Proposed Threatened	None	G5T1	S1	SSC
<b><i>Salvadora hexalepis virgultea</i></b> coast patch-nosed snake	ARADB30033	None	None	G5T4	S3	SSC
<b><i>Scutellaria bolanderi ssp. austromontana</i></b> southern mountains skullcap	PDLAM1U0A1	None	None	G4T3	S3	1B.2
<b><i>Senecio aphanactis</i></b> chaparral ragwort	PDAST8H060	None	None	G3	S2	1B.2
<b><i>Setophaga petechia</i></b> yellow warbler	ABPBX03010	None	None	G5	S3	SSC
<b><i>Sidalcea neomexicana</i></b> salt spring checkerbloom	PDMAL110J0	None	None	G4	S2	2B.2
<b><i>Southern Coast Live Oak Riparian Forest</i></b> Southern Coast Live Oak Riparian Forest	CTT61310CA	None	None	G4	S4	
<b><i>Southern Coastal Salt Marsh</i></b> Southern Coastal Salt Marsh	CTT52120CA	None	None	G2	S2.1	
<b><i>Southern Cottonwood Willow Riparian Forest</i></b> Southern Cottonwood Willow Riparian Forest	CTT61330CA	None	None	G3	S3.2	
<b><i>Southern Dune Scrub</i></b> Southern Dune Scrub	CTT21330CA	None	None	G1	S1.1	
<b><i>Southern Foredunes</i></b> Southern Foredunes	CTT21230CA	None	None	G2	S2.1	
<b><i>Southern Mixed Riparian Forest</i></b> Southern Mixed Riparian Forest	CTT61340CA	None	None	G2	S2.1	
<b><i>Southern Riparian Scrub</i></b> Southern Riparian Scrub	CTT63300CA	None	None	G3	S3.2	
<b><i>Southern Sycamore Alder Riparian Woodland</i></b> Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
<b><i>Spea hammondi</i></b> western spadefoot	AAABF02020	Proposed Threatened	None	G2G3	S3S4	SSC
<b><i>Streptocephalus woottoni</i></b> Riverside fairy shrimp	ICBRA07010	Endangered	None	G1G2	S2	
<b><i>Suaeda esteroa</i></b> estuary seablite	PDCHE0P0D0	None	None	G3	S2	1B.2
<b><i>Symphyotrichum defoliatum</i></b> San Bernardino aster	PDASTE80C0	None	None	G2	S2	1B.2
<b><i>Taricha torosa</i></b> Coast Range newt	AAAAF02032	None	None	G4	S4	SSC
<b><i>Taxidea taxus</i></b> American badger	AMAJF04010	None	None	G5	S3	SSC
<b><i>Tetracoccus dioicus</i></b> Parry's tetracoccus	PDEUP1C010	None	None	G2G3	S2	1B.2



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<b><i>Thamnophis hammondi</i></b> two-striped gartersnake	ARADB36160	None	None	G4	S3S4	SSC
<b><i>Thamnophis sirtalis pop. 1</i></b> south coast gartersnake	ARADB3613F	None	None	G5T1T2	S1S2	SSC
<b><i>Tortula californica</i></b> California screw moss	NBMUS7L090	None	None	G2G3	S2?	1B.2
<b><i>Valley Needlegrass Grassland</i></b> Valley Needlegrass Grassland	CTT42110CA	None	None	G3	S3.1	
<b><i>Verbesina dissita</i></b> big-leaved crownbeard	PDAST9R050	Threatened	Threatened	G1G2	S1	1B.1
<b><i>Vireo bellii pusillus</i></b> least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S3	

**Record Count: 129**











CALIFORNIA  
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

## CNPS Rare Plant Inventory





### Search Results

95 matches found. Click on scientific name for details




Search Criteria: , Quad is one of [3311766:3311765:3311764:3311754:3311755:3311756:3311746:3311745:3311744]









▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
<i>Abronia villosa</i> var. <i>aurita</i>	chaparral sand-verbena	Nyctaginaceae	annual herb	(Jan)Mar-Sep	None	None	G5T2?	S2	1B.1		2001-01-01	 <p>© 2011 Aaron E. Sims</p>
<i>Aldama purisimae</i>	La Purisima aldama	Asteraceae	shrub	Apr-Sep	None	None	G4	S1	2B.3		2007-09-05	 <p>© 2018 Ron Vanderhoff</p>
<i>Allium marvinii</i>	Yucaipa onion	Alliaceae	perennial bulbiferous herb	Apr-May	None	None	G1	S2	1B.2	Yes	2001-01-01	 <p>© 2013 Keir Morse</p>
<i>Allium munzii</i>	Munz's onion	Alliaceae	perennial bulbiferous herb	Mar-May	FE	CT	G1	S1	1B.1	Yes	1980-01-01	 <p>© 2003 Guy Bruyey</p>
<i>Ambrosia pumila</i>	San Diego ambrosia	Asteraceae	perennial rhizomatous herb	Apr-Oct	FE	None	G1	S1	1B.1		1974-01-01	 <p>© 2010 Benjamin Smith</p>
<i>Aphanisma blitoides</i>	aphanisma	Chenopodiaceae	annual herb	Feb-Jun	None	None	G3G4	S2	1B.2		1980-01-01	 <p>© 2010 Larry Sward</p>

<i>Arctostaphylos rainbowensis</i>	Rainbow manzanita	Ericaceae	perennial evergreen shrub	Dec-Mar	None	None	G2G3	S2S3	1B.1	Yes	1994-01-01	No Photo Available
<i>Artemisia palmeri</i>	San Diego sagewort	Asteraceae	perennial deciduous shrub	(Feb)May-Sep	None	None	G3?	S3?	4.2		1974-01-01	No Photo Available
<i>Asplenium vespertinum</i>	western spleenwort	Aspleniaceae	perennial rhizomatous herb	Feb-Jun	None	None	G3?	S4	4.2		1974-01-01	No Photo Available
<i>Astragalus brauntonii</i>	Braunton's milk-vetch	Fabaceae	perennial herb	Jan-Aug	FE	None	G2	S2	1B.1	Yes	1974-01-01	 © 2009 Thomas Stoughton
<i>Atriplex coulteri</i>	Coulter's saltbush	Chenopodiaceae	perennial herb	Mar-Oct	None	None	G3	S2	1B.2		1994-01-01	No Photo Available
<i>Atriplex pacifica</i>	south coast saltscale	Chenopodiaceae	annual herb	Mar-Oct	None	None	G4	S2	1B.2		1994-01-01	No Photo Available
<i>Baccharis vanessae</i>	Encinitas baccharis	Asteraceae	perennial deciduous shrub	Aug-Nov	FT	CE	G1	S1	1B.1	Yes	1980-01-01	No Photo Available
<i>Bahiopsis laciniata</i>	San Diego County viguiera	Asteraceae	perennial shrub	Feb-Jun(Aug)	None	None	G4	S4	4.3		1974-01-01	No Photo Available
<i>Brodiaea filifolia</i>	thread-leaved brodiaea	Themidaceae	perennial bulbiferous herb	Mar-Jun	FT	CE	G2	S2	1B.1	Yes	1974-01-01	 © 2016 Keir Morse
<i>Brodiaea orcuttii</i>	Orcutt's brodiaea	Themidaceae	perennial bulbiferous herb	May-Jul	None	None	G2	S2	1B.1	Yes	1974-01-01	 © 2001 Ellen Friedman & Ted Dunning
<i>Brodiaea santarosae</i>	Santa Rosa Basalt brodiaea	Themidaceae	perennial bulbiferous herb	May-Jun	None	None	G1	S1	1B.2	Yes	2008-02-05	 © 2021 W. Juergen Schrenk

<i>Calochortus plummerae</i>	Plummer's mariposa-lily	Liliaceae	perennial bulbiferous herb	May-Jul	None	None	G4	S4	4.2	Yes	1994-01-01	 © 2010 Aaron Schusteff
<i>Calochortus weedii</i> var. <i>intermedius</i>	intermediate mariposa-lily	Liliaceae	perennial bulbiferous herb	May-Jul	None	None	G3G4T3	S3	1B.2	Yes	1994-01-01	No Photo Available
<i>Caulanthus simulans</i>	Payson's jewelflower	Brassicaceae	annual herb	(Feb)Mar-May(Jun)	None	None	G4	S4	4.2	Yes	1974-01-01	No Photo Available
<i>Ceanothus pendletonensis</i>	Pendleton ceanothus	Rhamnaceae	perennial shrub	Mar-Jun	None	None	G1	S1	1B.2	Yes	2019-01-30	 © 2019 Ron Vanderhoff
<i>Centromadia parryi</i> ssp. <i>australis</i>	southern tarplant	Asteraceae	annual herb	May-Nov	None	None	G3T2	S2	1B.1		1994-01-01	No Photo Available
<i>Centromadia pungens</i> ssp. <i>laevis</i>	smooth tarplant	Asteraceae	annual herb	Apr-Sep	None	None	G3G4T2	S2	1B.1	Yes	1994-01-01	No Photo Available
<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	Orcutt's pincushion	Asteraceae	annual herb	Jan-Aug	None	None	G5T1	S1	1B.1		2001-01-01	No Photo Available
<i>Chamaebatia australis</i>	southern mountain misery	Rosaceae	perennial evergreen shrub	Nov-May	None	None	G4	S4	4.2		1974-01-01	 © 2007 Andrew Borchert
<i>Chorizanthe leptotheca</i>	Peninsular spineflower	Polygonaceae	annual herb	May-Aug	None	None	G3	S3	4.2		1994-01-01	No Photo Available
<i>Chorizanthe parryi</i> var. <i>parryi</i>	Parry's spineflower	Polygonaceae	annual herb	Apr-Jun	None	None	G3T2	S2	1B.1	Yes	1994-01-01	 © 2012 Keir Morse
<i>Chorizanthe polygonoides</i> var. <i>longispina</i>	long-spined spineflower	Polygonaceae	annual herb	Apr-Jul	None	None	G5T3	S3	1B.2		1994-01-01	No Photo Available
<i>Cistanthe maritima</i>	seaside cistanthe	Montiaceae	annual herb	(Feb)Mar-Jun(Aug)	None	None	G3G4	S3	4.2		1980-01-01	No Photo Available









<i>Clinopodium chandleri</i>	San Miguel savory	Lamiaceae	perennial shrub	Mar-Jul	None	None	G2G3	S2	1B.2		1974-01-01	No Photo Available
<i>Collomia diversifolia</i>	serpentine collomia	Polemoniaceae	annual herb	May-Jun	None	None	G4	S4	4.3	Yes	1974-01-01	 ©2019 Zoya Akulova
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	summer holly	Ericaceae	perennial evergreen shrub	Apr-Jun	None	None	G3T2	S2	1B.2		1980-01-01	No Photo Available
<i>Convolvulus simulans</i>	small-flowered morning-glory	Convolvulaceae	annual herb	Mar-Jul	None	None	G4	S4	4.2		1994-01-01	No Photo Available
<i>Deinandra paniculata</i>	paniculate tarplant	Asteraceae	annual herb	(Mar)Apr-Nov	None	None	G4	S4	4.2		2001-01-01	No Photo Available
<i>Dichondra occidentalis</i>	western dichondra	Convolvulaceae	perennial rhizomatous herb	(Jan)Mar-Jul	None	None	G3G4	S3S4	4.2		1974-01-01	No Photo Available
<i>Diplacus clevelandii</i>	Cleveland's bush monkeyflower	Phrymaceae	perennial rhizomatous herb	Apr-Jul	None	None	G4	S4	4.2		1980-01-01	 © 2020 W. Juergen Schrenk
<i>Dodecahema leptoceras</i>	slender-horned spineflower	Polygonaceae	annual herb	Apr-Jun	FE	CE	G1	S1	1B.1	Yes	1980-01-01	No Photo Available
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	Blochman's dudleya	Crassulaceae	perennial herb	Apr-Jun	None	None	G3T2	S2	1B.1		1974-01-01	 © 2011 Aaron E. Sims
<i>Dudleya chasmophyta</i>	Santiago Canyon dudleya	Crassulaceae	perennial herb	May-Jun	None	None	G1	S1	1B.1	Yes	2024-08-28	No Photo Available
<i>Dudleya multicaulis</i>	many-stemmed dudleya	Crassulaceae	perennial herb	Apr-Jul	None	None	G2	S2	1B.2	Yes	1974-01-01	No Photo Available
<i>Dudleya stolonifera</i>	Laguna Beach dudleya	Crassulaceae	perennial stoloniferous herb	May-Jul	FT	CT	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
<i>Dudleya viscida</i>	sticky dudleya	Crassulaceae	perennial herb	May-Jun	None	None	G2	S2	1B.2	Yes	1974-01-01	No Photo Available


<i>Eryngium pendletonense</i>	Pendleton button-celery	Apiaceae	perennial herb	Apr-Jun(Jul)	None	None	G1	S1	1B.1	Yes	2001-01-01	 © 2009 Vince Scheidt
<i>Erythranthe diffusa</i>	Palomar monkeyflower	Phrymaceae	annual herb	Apr-Jun	None	None	G4	S3	4.3		1974-01-01	 Ron Vanderhoff, 2019
<i>Euphorbia misera</i>	cliff spurge	Euphorbiaceae	perennial shrub	(Oct)Dec-Aug	None	None	G5	S2	2B.2		1974-01-01	No Photo Available
<i>Harpagonella palmeri</i>	Palmer's grapplinghook	Boraginaceae	annual herb	Mar-May	None	None	G4	S3	4.2		1980-01-01	 © 2015 Keir Morse
<i>Hesperocyparis forbesii</i>	Tecate cypress	Cupressaceae	perennial evergreen tree		None	None	G2	S2	1B.1		1974-01-01	 © 2011 Joey Malone
<i>Holocarpha virgata</i> ssp. <i>elongata</i>	graceful tarplant	Asteraceae	annual herb	May-Nov	None	None	G5T3	S3	4.2	Yes	1994-01-01	 © 2013 Anna Bennett
<i>Hordeum intercedens</i>	vernal barley	Poaceae	annual herb	Mar-Jun	None	None	G3G4	S3S4	3.2		1994-01-01	No Photo Available
<i>Horkelia cuneata</i> var. <i>puberula</i>	mesa horkelia	Rosaceae	perennial herb	Feb-Jul(Sep)	None	None	G4T1	S1	1B.1	Yes	2001-01-01	 © 2008 Tony Morosco
<i>Horkelia truncata</i>	Ramona horkelia	Rosaceae	perennial herb	May-Jun	None	None	G3	S3	1B.3		1974-01-01	 © 2008 Andrew Borchert
<i>Imperata brevifolia</i>	California satintail	Poaceae	perennial rhizomatous herb	Sep-May	None	None	G3	S3	2B.1		2006-12-26	 © 2020 Matt C. Berger
<i>Isocoma menziesii</i> var. <i>decumbens</i>	decumbent goldenbush	Asteraceae	perennial shrub	Apr-Nov	None	None	G3G5T2T3	S2	1B.2		1994-01-01	No Photo Available

<i>Juglans californica</i>	Southern California black walnut	Juglandaceae	perennial deciduous tree	Mar-Aug	None	None	G4	S4	4.2	Yes	1994-01-01	 © 2020 Zoya Akulova
<i>Juncus acutus</i> ssp. <i>leopoldii</i>	southwestern spiny rush	Juncaceae	perennial rhizomatous herb	(Mar)May-Jun	None	None	G5T5	S4	4.2		1988-01-01	 © 2019 Belinda Lo
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	None	None	G4T2	S2	1B.1		1994-01-01	 © 2013 Keir Morse
<i>Lathyrus splendens</i>	pride-of-California	Fabaceae	perennial herb	Mar-Jun	None	None	G4	S4	4.3		1974-01-01	 © 2012 Ron Clark
<i>Lepechinia cardiophylla</i>	heart-leaved pitcher sage	Lamiaceae	perennial shrub	Apr-Jul	None	None	G3	S2S3	1B.2		1974-01-01	 © 2003 Vince Scheidt
<i>Lepidium virginicum</i> var. <i>robinsonii</i>	Robinson's pepper-grass	Brassicaceae	annual herb	Jan-Jul	None	None	G5T3	S3	4.3		1994-01-01	 © 2015 Keir Morse
<i>Lessingia hololeuca</i>	woolly-headed lessingia	Asteraceae	annual herb	Jun-Oct	None	None	G2G3	S2S3	3	Yes	1994-01-01	 © 2015 Aaron Schusteff
<i>Lilium humboldtii</i> ssp. <i>ocellatum</i>	ocellated Humboldt lily	Liliaceae	perennial bulbiferous herb	Mar-Jul(Aug)	None	None	G4T4?	S4?	4.2	Yes	1980-01-01	 © 2008 Thomas Stoughton
<i>Lilium parryi</i>	lemon lily	Liliaceae	perennial bulbiferous herb	Jul-Aug	None	None	G3	S3	1B.2		1974-01-01	 © 2009 Thomas Stoughton
<i>Lycium brevipes</i> var. <i>hassei</i>	Santa Catalina Island desert-thorn	Solanaceae	perennial deciduous shrub	Jun(Aug)	None	None	G5T1Q	S1	3.1	Yes	1974-01-01	No Photo Available



<i>Lycium californicum</i>	California box-thorn	Solanaceae	perennial shrub	Mar-Aug(Dec)	None	None	G4	S4	4.2		2001-01-01	No Photo Available
<i>Malacothrix saxatilis</i> var. <i>saxatilis</i>	cliff malacothrix	Asteraceae	perennial rhizomatous herb	Mar-Sep	None	None	G5T4	S4	4.2	Yes	2001-01-01	No Photo Available
<i>Microseris douglasii</i> ssp. <i>platycarpa</i>	small-flowered microseris	Asteraceae	annual herb	Mar-May	None	None	G4T4	S4	4.2		2001-01-01	 © 2015 Richard Spellenberg
<i>Monardella hypoleuca</i> ssp. <i>intermedia</i>	intermediate monardella	Lamiaceae	perennial rhizomatous herb	Apr-Sep	None	None	G4T2?	S2?	1B.3	Yes	2012-10-16	 © 2016 Ron Vanderhoff
<i>Monardella macrantha</i> ssp. <i>hallii</i>	Hall's monardella	Lamiaceae	perennial rhizomatous herb	Jun-Oct	None	None	G5T3	S3	1B.3	Yes	1974-01-01	No Photo Available
<i>Myosurus minimus</i> ssp. <i>apus</i>	little mousetail	Ranunculaceae	annual herb	Mar-Jun	None	None	G5T2Q	S2	3.1		1980-01-01	No Photo Available
<i>Nama stenocarpa</i>	mud nama	Namaceae	annual/perennial herb	Jan-Jul	None	None	G4G5	S1S2	2B.2		1994-01-01	No Photo Available
<i>Navarretia prostrata</i>	prostrate vernal pool navarretia	Polemoniaceae	annual herb	Apr-Jul	None	None	G2	S2	1B.2	Yes	2001-01-01	No Photo Available
<i>Nolina cismontana</i>	chaparral nolina	Ruscaceae	perennial evergreen shrub	(Mar)May-Jul	None	None	G3	S3	1B.2	Yes	2001-01-01	 © 2005 Santa Monica Mountains National Recreation Area
<i>Pentachaeta aurea</i> ssp. <i>allenii</i>	Allen's pentachaeta	Asteraceae	annual herb	Mar-Jun	None	None	G4T1	S1	1B.1	Yes	2008-05-08	 ©2008 Bob Allen
<i>Pentachaeta aurea</i> ssp. <i>aurea</i>	golden-rayed pentachaeta	Asteraceae	annual herb	Mar-Jul	None	None	G4T3	S3	4.2		2001-01-01	No Photo Available

<i>Phacelia hubbyi</i>	Hubby's phacelia	Hydrophyllaceae	annual herb	Apr-Jul	None	None	G4	S4	4.2	Yes	2007-02-02	No Photo Available
<i>Phacelia keckii</i>	Santiago Peak phacelia	Hydrophyllaceae	annual herb	May-Jul	None	None	G1	S1	1B.3	Yes	1980-01-01	No Photo Available
<i>Phacelia ramosissima</i> var. <i>austrolitoralis</i>	south coast branching phacelia	Hydrophyllaceae	perennial herb	Mar-Aug	None	None	G5?T3Q	S3	3.2		2007-05-17	No Photo Available
<i>Piperia cooperi</i>	chaparral rein orchid	Orchidaceae	perennial herb	Mar-Jun	None	None	G3	S3S4	4.2		2001-01-01	No Photo Available
<i>Piperia leptopetala</i>	narrow-petaled rein orchid	Orchidaceae	perennial herb	May-Jul	None	None	G4	S4	4.3	Yes	2001-01-01	 ©2006 Brad Kelley
<i>Pseudognaphalium leucocephalum</i>	white rabbit-tobacco	Asteraceae	perennial herb	(Jul)Aug-Nov(Dec)	None	None	G4	S2	2B.2		2006-11-03	 © Anuja Parikh and Nathan Gale
<i>Quercus dumosa</i>	Nuttall's scrub oak	Fagaceae	perennial evergreen shrub	Feb-Apr(May-Aug)	None	None	G3	S3	1B.1		1994-01-01	No Photo Available
<i>Quercus engelmannii</i>	Engelmann oak	Fagaceae	perennial deciduous tree	Mar-Jun	None	None	G3	S3	4.2		1988-01-01	No Photo Available
<i>Rhinotropis cornuta</i> var. <i>fishiae</i>	Fish's milkwort	Polygalaceae	perennial deciduous shrub	May-Aug	None	None	G5T4	S4	4.3		1974-01-01	No Photo Available
<i>Romneya coulteri</i>	Coulter's matilija poppy	Papaveraceae	perennial rhizomatous herb	Mar-Jul(Aug)	None	None	G4	S4	4.2		1974-01-01	No Photo Available
<i>Saltugilia caruifolia</i>	caraway-leaved woodland-gilia	Polemoniaceae	annual herb	May-Aug	None	None	G4	S4	4.3		1974-01-01	No Photo Available
<i>Scutellaria bolanderi</i> ssp. <i>austromontana</i>	southern mountains skullcap	Lamiaceae	perennial rhizomatous herb	Jun-Aug	None	None	G4T3	S3	1B.2	Yes	1994-01-01	No Photo Available
<i>Selaginella cinerascens</i>	ashy spike-moss	Selaginellaceae	perennial rhizomatous herb		None	None	G3G4	S3?	4.1		1974-01-01	No Photo Available

<i>Senecio aphanactis</i>	chaparral ragwort	Asteraceae	annual herb	Jan-Apr(May)	None	None	G3	S2	1B.2		1994-01-01	 <div>Neal Kramer</div>
<i>Sidalcea neomexicana</i>	salt spring checkerbloom	Malvaceae	perennial herb	Mar-Jun	None	None	G4	S2	2B.2		1994-01-01	No Photo Available
<i>Suaeda esteroa</i>	estuary seablite	Chenopodiaceae	perennial herb	(Jan-May)Jul-Oct	None	None	G3	S2	1B.2		1984-01-01	No Photo Available
<i>Suaeda taxifolia</i>	woolly seablite	Chenopodiaceae	perennial evergreen shrub	Jan-Dec	None	None	G4	S3S4	4.2		1994-01-01	No Photo Available
<i>Symphyotrichum defoliatum</i>	San Bernardino aster	Asteraceae	perennial rhizomatous herb	Jul-Nov	None	None	G2	S2	1B.2	Yes	2004-01-01	No Photo Available
<i>Tetracoccus dioicus</i>	Parry's tetracoccus	Picrodendraceae	perennial deciduous shrub	Apr-May	None	None	G2G3	S2	1B.2		1974-01-01	No Photo Available
<i>Tortula californica</i>	California screw moss	Pottiaceae	moss		None	None	G2G3	S2?	1B.2	Yes	2001-01-01	No Photo Available
<i>Verbesina dissita</i>	big-leaved crownbeard	Asteraceae	perennial herb	(Mar)Apr-Jul	FT	CT	G1G2	S1	1B.1		1984-01-01	No Photo Available

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## Appendix C: Plant and Animal Species Observed

### A.1 Vascular Plant Species Observed

The following vascular plant species were observed in the specified study area by LSA biologists.

\* Introduced species not native to California

#### A.1.1 Gymnosperms

##### Cupressaceae

*Juniperus occidentalis*

##### Cypress Family

Western juniper

##### Pinaceae

\* *Pinus* sp.

##### Pine Family

Pine

#### A.1.2 Lycophytes

##### Lauraceae

*Umbellularia californica*

##### Laurel Family

California bay laurel

#### A.1.3 Eudicots

##### Adoxaceae

*Sambucus nigra* ssp. *caerulea*

##### Muskroot Family

Blue elderberry

##### Anacardiaceae

*Malosma laurina*

*Rhus integrifolia*

*Rhus ovata*

\* *Schinus molle*

\* *Schinus terebinthifolius*

*Toxicodendron diversilobum*

##### Sumac Family

Laurel sumac

Lemonade berry

Sugar bush

Peruvian pepper tree

Brazilian pepper tree

Poison oak

##### Apocynaceae

\* *Nerium oleander*

##### Dogbane Family

Oleander

##### Asparagaceae

\* *Asparagus densiflorus*

##### Asparagus Family

Asparagus fern

##### Asteraceae

*Achillea millefolium*

*Artemisia californica*

*Artemisia douglasiana*

*Baccharis pilularis* ssp. *consaguinea*

*Baccharis salicifolia* ssp. *salicifolia*

\* *Centaurea melitensis*

##### Sunflower Family

Common yarrow

California sagebrush

Mugwort

Coyote brush

Mule fat

Tocalote

Natural Environment Study (Minimal Impacts)

* <i>Cynara cardunculus</i>	Artichoke thistle
* <i>Dimorphotheca sinuata</i>	African daisy
<i>Helianthus annuus</i>	Western sunflower
* <i>Helminthotheca echiodes</i>	Bristly ox-tongue
<i>Isocoma menziesii</i> var. <i>vernonioides</i>	Coastal goldenbush
* <i>Silybum marianum</i>	Milk thistle
* <i>Taraxacum officinale</i>	Common dandelion
<b>Brassicaceae</b>	<b>Mustard Family</b>
* <i>Brassica nigra</i>	Black mustard
* <i>Hirschfeldia incana</i>	Shortpod mustard
<b>Cactaceae</b>	<b>Cactus Family</b>
<i>Opuntia littoralis</i>	Coastal prickly pear
<i>Opuntia x occidentalis</i>	Prickly pear hybrid
<b>Caprifoliaceae</b>	<b>Honeysuckle Family</b>
* <i>Lonicera japonica</i>	Japanese honeysuckle
<b>Caryophyllaceae</b>	<b>Pink Family</b>
* <i>Stellaria media</i>	Common chickweed
<b>Chenopodiaceae</b>	<b>Goosefoot Family</b>
* <i>Salsola tragus</i>	Russian-thistle
<b>Cleomaceae</b>	<b>Spiderflower Family</b>
<i>Peritoma arborea</i>	Bladderpod
<b>Convolvulaceae</b>	<b>Morning-glory Family</b>
<i>Calystegia macrostegia</i>	Morning-glory
* <i>Convolvulus arvensis</i>	Field bindweed
<b>Crassulaceae</b>	<b>Stonecrop Family</b>
<i>Dudleya lanceolata</i>	Lance-leaved dudleya
<i>Dudleya pulverulenta</i> ssp. <i>pulverulenta</i>	Chalk dudleya
<b>Cucurbitaceae</b>	<b>Gourd Family</b>
<i>Marah macrocarpa</i>	Wild cucumber
<b>Euphorbiaceae</b>	<b>Spurge Family</b>
<i>Chamaesyce albomarginata</i>	Rattlesnake spurge
<i>Croton setigerus</i>	Doveweed
* <i>Ricinus communis</i>	Castor bean
<b>Fabaceae</b>	<b>Legume Family</b>
<i>Acemisson glaber</i>	Coastal deerweed
* <i>Melilotus albus</i>	White sweetclover
<b>Fagaceae</b>	<b>Oak Family</b>
<i>Quercus agrifolia</i> var. <i>agrifolia</i>	Coast live oak
<b>Lamiaceae</b>	<b>Mint Family</b>
<i>Salvia apiana</i>	White sage



*Salvia mellifera*  
**Malvaceae**  
*Malacothamnus fasciculatus*  
 \* *Malva parviflora*

**Oleaceae**  
 \* *Olea europaea*

**Papaveraceae**  
*Eschscholzia californica*

**Phrymaceae**  
*Erythranthe cardinalis*

**Plantaginaceae**  
*Keckiella cordifolia*

**Platanaceae**  
*Platanus racemosa*

**Polygonaceae**  
*Eriogonum fasciculatum*

**Rhamnaceae**  
*Rhamnus ilicifolia*

**Rosaceae**  
*Heteromeles arbutifolia*

**Rubiaceae**  
*Galium angustifolium*

**Rutaceae**  
 \* *Citrus sinensis*

**Salicaceae**  
*Salix lasiolepis*

**Solanaceae**  
 \* *Nicotiana glauca*

**Tropaeolaceae**  
 \* *Tropaeolum majus*

**Viscaceae**  
*Phoradendron serotinum x tomentosum*

#### A.1.4 Monocots

**Poaceae**  
 \* *Avena barbata*  
 \* *Avena fatua*  
 \* *Bromus diandrus*

Black sage

**Mallow Family**  
 Chaparral mallow  
 Cheeseweed

**Olive Family**  
 European olive

**Poppy Family**  
 California poppy

**Lopseed Family**  
 Scarlet monkey flower

**Plantain Family**  
 Heart-leaved bush-penstemon

**Sycamore Family**  
 Western sycamore

**Buckwheat Family**  
 California buckwheat

**Buckthorn Family**  
 Hollyleaf redberry

**Rose Family**  
 Toyon

**Madder Family**  
 Narrow-leaved bedstraw

**Rue Family**  
 Sweet orange tree

**Willow Family**  
 Arroyo willow

**Nightshade Family**  
 Tree tobacco

**Nasturtium Family**  
 Garden nasturtium

**Mistletoe Family**  
 Oak mistletoe

**Grass Family**  
 Slender wild oat  
 Wild oat  
 Ripgut grass

*Natural Environment Study (Minimal Impacts)*

*	<i>Bromus madritensis</i> ssp. <i>rubens</i>	Red brome
*	<i>Cynodon dactylon</i>	Bermuda grass
*	<i>Pennisetum setaceum</i>	Crimson fountain grass

Taxonomy and scientific nomenclature generally conform to Baldwin, B.G., D.H. Goldman et al., eds. (2012; *The Jepson Manual: Vascular Plants of California*, 2<sup>nd</sup> edition; University of California Press, Berkeley and Los Angeles, California).

Common names for each taxa generally conform to Roberts, F.M., Jr. (2008; *The Vascular Plants of Orange County, California: An Annotated Checklist*; F.M. Roberts Publications, San Luis Rey, California) except where Abrams, L. (1923, 1944, and 1951; *Illustrated Flora of the Pacific States: Washington, Oregon, and California*, vols. I–III; Stanford University Press, Stanford, California) and Abrams, L. and Ferris, R.S. (1960; *Illustrated Flora of the Pacific States: Washington, Oregon, and California*, vol. IV; Stanford University Press, Stanford, California) were used, particularly when species-specific common names were not identified in Roberts, F.M., Jr. (2008).

## A.2 Animal Species Observed

This is a list of the conspicuous aerial insects (i.e., damselflies, dragonflies, and butterflies), bony fishes, amphibians, reptiles, birds, and mammals noted in the study area by LSA biologists. Presence may be noted if a species is seen or heard, or identified by the presence of tracks, scat, or other signs. Please note that most species are listed in phylogenetic order of relation.

\* Species not native to the study area

### A.2.1 Birds

#### Anatidae

*Branta canadensis*

- \* *Alopochen aegyptiacus*
- Anas platyrhynchos*
- Oxyura jamaicensis*

#### Odontophoridae

*Callipepla californica*

#### Podicipedidae

*Podilymbus podiceps*

#### Columbidae

- \* *Columba fasciata*
- Columba livia*
- \* *Streptopelia decaocto*
- Zenaidura macroura*

#### Trochilidae

*Calypte anna*  
*Selasphorus sasin*

#### Rallidae

*Fulica americana*

#### Ardeidae

*Ardea alba*  
*Egretta thula*  
*Bubulcus ibis*  
*Nycticorax nycticorax*

#### Cathartidae

*Cathartes aura*

#### Accipitridae

*Buteo lineatus*  
*Buteo jamaicensis*

#### Ducks, Geese, and Swans

Canada goose  
Egyptian goose  
Mallard  
Ruddy duck

#### New World Quail

California quail

#### Grebes

Pied-billed grebe

#### Pigeons and Doves

Band-tailed pigeon  
Rock pigeon  
Eurasian collared-dove  
Mourning dove

#### Hummingbirds

Anna's hummingbird  
Allen's hummingbird

#### Rails, Gallinules, and Coots

American coot

#### Herons, Bitterns, and Allies

Great egret  
Snowy egret  
Cattle egret  
Black-crowned night-heron

#### American Vultures

Turkey Vulture

#### Hawks, Kites, Eagles, and Allies

Red-shouldered hawk  
Red-tailed hawk



**Picidae**

*Dryobates pubescens*  
*Dryobates nuttallii*  
*Melanerpes formicivorus*

**Psittacidae**

\* *Amazona viridigenalis*

**Tyrannidae**

*Contopus sordidulus*  
*Empidonax difficilis*  
*Sayornis nigricans*  
*Sayornis saya*  
*Pyrocephalus rubinus*  
*Myiarchus cinerascens*  
*Tyrannus vociferans*  
*Tyrannus verticalis*

**Vireonidae**

*Vireo gilvus*

**Corvidae**

*Aphelocoma californica*  
*Corvus brachyrhynchos*  
*Corvus corax*

**Hirundinidae**

*Stelgidopteryx serripennis*

**Aegithalidae**

*Psaltirparus minimus*

**Zosteropidae**

\* *Zosterops simplex/palpebrosus*

**Troglodytidae**

*Thryomanes bewickii*

**Sylviidae**

*Chamaea fasciata*

**Turdidae**

*Sialia mexicana*  
*Catharus guttatus*

**Sturnidae**

\* *Sturnus vulgaris*

**Viduidae**

\* *Vidua macroura*

**Passeridae**

\* *Passer domesticus*

**Woodpeckers and Allies**

Downy woodpecker  
Nuttall's woodpecker  
Acorn woodpecker

**African and New World Parrots**

Red-crowned parrot

**Tyrant Flycatchers**

Western wood-pewee  
Western flycatcher  
Black phoebe  
Say's phoebe  
Vermilion flycatcher  
Ash-throated flycatcher  
Cassin's kingbird  
Western kingbird

**Vireos**

Warbling vireo

**Crows and Jays**

California scrub-jay  
American crow  
Common raven

**Swallows**

Northern rough-winged swallow

**Long-Tailed Tits and Bushtits**

Bushtit

**White-eyes**

Swinhoe's/Indian white-eye

**Wrens**

Bewick's wren

**Sylviid Warblers**

Wrentit

**Thrushes**

Western bluebird  
Hermit thrush

**Starlings**

European starling

**Whydahs**

Pin-tailed whydah

**Old World Sparrows**

House sparrow

**Fringillidae**

*Haemorhous mexicanus*  
*Spinus psaltria*  
*Spinus lawrencei*  
*Spinus tristis*

**Passerellidae**

*Junco hyemalis*  
*Melospiza melodia*  
*Melospiza crissalis*  
*Pipilo maculatus*

**Icteridae**

*Agelaius phoeniceus*  
*Quiscalus mexicanus*

**Parulidae**

*Leiothlypis celata*  
*Geothlypis trichas*  
*Setophaga petechia*  
*Setophaga coronata*

**Cardinalidae**

*Pheucticus melanocephalus*  
*Passerina caerulea*

**Fringilline and Cardueline Finches and Allies**

House finch  
Lesser goldfinch  
Lawrence's goldfinch  
American goldfinch

**New World Sparrows**

Dark-eyed junco  
Song sparrow  
California towhee  
Spotted towhee

**Blackbirds**

Red-winged blackbird  
Great-tailed grackle

**Wood Warblers**

Orange-crowned warbler  
Common yellowthroat  
Yellow warbler (SSC)  
Yellow-rumped warbler

**Cardinals and Allies**

Black-headed grosbeak  
Blue grosbeak

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## **Appendix D:** Jurisdictional Delineation Report

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# **JURISDICTIONAL DELINEATION REPORT**

## **SR-74 MULTI-ASSET MANAGEMENT PROJECT**

### **ORANGE COUNTY, CALIFORNIA**

12-ORA-SR74 (PM 0.0 to PM 11.5)  
EA OR990  
1219000072

Prepared for:

State of California  
Department of Transportation, Lead Agency  
District 12, Orange County  
1750 East 4<sup>th</sup> Street, Suite 100  
Santa Ana, California 92705

Prepared by:

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LSA Project No. CDT2201.32



November 2025



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APPENDIX

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## LIST OF ABBREVIATIONS AND ACRONYMS

1987 Manual	<i>Corps of Engineers 1987 Wetland Delineation Manual</i>
amsl	above mean sea level
Caspers	Ronald W. Caspers Wilderness Park
CDFW	California Department of Fish and Wildlife
CFR	Code of Federal Regulations
CWA	Clean Water Act
EPA	United States Environmental Protection Agency
FAC	Facultative
FACU	Facultative Upland
FACW	Facultative Wetland
ft	foot/feet
HUC	Hydrologic Unit Code
I	Interstate
JD	Jurisdictional Delineation
JDSA	Jurisdictional Delineation Study Area
LF	linear feet
NETR	Nationwide Environmental Title Research, LLC
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
OBL	Obligate Wetland
OHWM	Ordinary High Water Mark
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
PM	Post Mile
Procedures	<i>State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State</i>
project	SR-74 Multi-Asset Management Project
<i>Rapanos</i>	2006 United States Supreme Court decision in the consolidated cases <i>Rapanos v. United States</i> and <i>Carabell v. United States</i>



Regional Supplement	<i>Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region</i>
RWQCB	Regional Water Quality Control Board
<i>Sackett</i>	2023 United States Supreme Court wetlands definition ruling <i>Sackett v. Environmental Protection Agency</i>
SR	State Route
SWANCC	Solid Waste Agency of North Cook County
SWRCB	State Water Resources Control Board
TNW	Traditionally Navigable Water
UPL	Obligate Upland
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WOTS	waters of the State
WOTUS	waters of the United States

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## INTRODUCTION

This Jurisdictional Delineation (JD) Report presents the results of a delineation of aquatic resources and drainage features conducted for the SR-74 Multi-Asset Management Project (project), located in the city of San Juan Capistrano and unincorporated Orange County, California. The proposed project would repair roadways, add traffic safety devices, complete street elements, and improve the drainage system along State Route (SR) 74. The improvements will be in Orange County, California, on SR-74 from Post Mile (PM) 0.0 to PM 11.5, in the city of San Juan Capistrano and unincorporated Orange County, California. The proposed project would include improvements along SR-74 from the SR-74/Interstate (I) 5 separation (PM 0.0) to 1 mile east of San Juan Creek (PM 11.5).

The Jurisdictional Delineation Study Area (JDSA) covered the entirety of the project area. The purpose of this delineation report is to determine the extent of both State of California and federal jurisdiction within the JDSA. This includes the potential jurisdiction of the United States Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA), the Regional Water Quality Control Board (RWQCB) under Section 401 of the CWA and/or the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), and the California Department of Fish and Wildlife (CDFW) under Section 1602 of the California Fish and Game Code. This report has been prepared to inform the environmental planning and review process. All referenced figures are included in Appendix A.

## SITE DESCRIPTION AND SETTING

The JDSA is located within the United States Geological Survey (USGS) *Dana Point, San Juan Capistrano*, and *Canada Gobernadora* 7.5-minute series topographic quadrangles. As shown on Figure 1, the JDSA extends along SR-74 from the SR-74/I-5 separation to 1 mile east of San Juan Creek and traverses Ronald W. Caspers Wilderness Park (Caspers) and the Cleveland National Forest. The project area consists of developed and undeveloped areas surrounded by a variety of land uses, including residential, some commercial, recreational, and undeveloped/open space.

Elevations in the JDSA range from approximately 114 feet (ft) above mean sea level (amsl) to approximately 660 ft amsl. The topography within the JDSA ranges from flat ground to moderate rolling hills adjacent to SR-74. The hillsides from the Santa Ana Mountains border both sides of SR-74.

The JDSA is within the Lower San Juan Creek (Hydrologic Unit Code [HUC] 180703010104) and Middle San Juan Creek (HUC 180703010102) watersheds. Surface waters within the JDSA of SR-74 are ultimately conveyed to San Juan Creek. San Juan Creek discharges into the Pacific Ocean, a traditional navigable water (TNW) of the United States.

Based on a review of historic aerial photographs and topographic maps of the project area dating back to 1938 (NETR 2025), the JDSA consisted of mostly undeveloped land and some agricultural land until at least the 1980s, when SR-74 was developed. The project site has remained relatively unchanged through the present.

The JDSA supports a mosaic of plant communities and land cover types, including ornamental, ruderal, western sycamore (*Platanus racemosa*) riparian, coast live oak (*Quercus agrifolia*) woodland, coast live oak riparian, coastal sage scrub, chaparral, and developed areas, as shown on Figure 2. Within the JDSA, SR-74 passes through a series of open spaces within the Santa Ana Mountains. The climate is classified as Mediterranean (i.e., arid climate with hot, dry summers and mild, wet winters). The average annual precipitation is 14.85 inches. Although most of the precipitation occurs from November through May, thunderstorms may occur at other times of the year and can result in high rates of precipitation.



## REGULATORY BACKGROUND

### UNITED STATES ARMY CORPS OF ENGINEERS

The CWA provides the primary means for the protection of “waters of the United States” (WOTUS), including wetlands. Under Section 404 of the CWA, the USACE, under the United States Environmental Protection Agency (EPA), regulates the discharge of dredged and fill material into “Waters of the U.S., including wetlands.”

The CWA addresses “navigable waters,” as defined in the statute as WOTUS. The USACE has further refined the definition through various Clean Water Rules, including wetlands as a subset of WOTUS. Wetlands are those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas (33 Code of Federal Regulations [CFR] 328.3[b] and 40 CFR 230.3[t]). Wetlands generally contain three distinct parameters: hydrophytic vegetation, hydric soils, and wetland hydrology.

WOTUS generally not considered to be USACE-jurisdictional include nontidal drainage and irrigation ditches excavated on dry land, artificially irrigated areas, artificial lakes or ponds excavated on dry land used for irrigation or stock watering, small artificial water bodies such as swimming pools, and water-filled depressions (51 *Federal Register* 41, 217 1986). In addition, a Supreme Court ruling (*South Waste Agency of North Cook County [SWANCC] vs. USACE*, January 9, 2001) determined that the USACE exceeded its statutory authority by asserting CWA jurisdiction over “an abandoned sand and gravel pit in northern Illinois, which provides habitat for migratory birds.” Based solely on the use of such waters by migratory birds, the Supreme Court’s holding was strictly limited to waters that are “non-navigable, isolated, and intrastate.”

The Supreme Court further addressed the extent of the USACE’s jurisdiction in the consolidated cases *Rapanos v. United States* (No. 04-1034) and *Carabell v. United States* (No. 04-1384) (USACE and EPA 2007), referred to as “*Rapanos*.” In *Rapanos*, a sharply divided Court issued multiple opinions, none of which garnered the support of a majority of Justices. This created substantial uncertainty as to which jurisdictional test should be used in routine jurisdictional determinations. The Ninth Circuit Court of Appeal, which encompasses California, answered this in *Northern California River Watch v. City of Healdsburg* (August 11, 2006). In this case, the Court held that Justice Kennedy’s opinion in *Rapanos* provided the controlling rule of law. Under that rule, wetlands or other waters that are not navigable are subject to USACE jurisdiction if they have “a significant nexus to waters that are navigable in fact.” As Justice Kennedy explained, whether a “significant nexus” exists in any given situation will need to be decided on a case-by-case basis, depending on site-specific circumstances. The EPA and USACE subsequently developed an instructional guidebook on how to apply these rulings for all future jurisdictional determinations (USACE and EPA 2007), as well as a memorandum providing guidance to implement the United States Supreme Court’s decision in *Rapanos* (Grumbles and Woodley 2007).

On January 18, 2023, the USACE published in the *Federal Register* the final *Revised Definition of "Waters of the United States"* (88 *Federal Register* 2004). On March 25, 2023, the United States Supreme Court modified the January 2023 definition of WOTUS in *Sackett v. Environmental Protection Agency* (598 U.S. 651, 2023) hereafter referred to as *Sackett*. Specifically, the Supreme Court considered the "significant nexus" standard established under *Rapanos* to be inconsistent with the CWA, while upholding the plurality standard that the USACE jurisdiction is limited to WOTUS that are "relatively permanent, standing or continuously flowing bodies of water" that can be described in ordinary parlance as "streams, oceans, rivers, and lakes." The Supreme Court further affirmed that wetlands can be considered WOTUS when a continuous surface connection to bodies that are WOTUS is present and that no clear boundary exists between WOTUS and wetlands. *Sackett* further revised the CWA by removing wetlands from consideration as WOTUS simply because they cross or form a portion of State boundaries.

On September 8, 2023, the USACE published a final rule conforming the January 2023 rule with the *Sackett* decision, removing the "significant nexus" standard. The amended rule is operative in California.

Features currently **included** in the definition of WOTUS per 33 CFR 328.3(b) include:

- (1) Waters which are:
  - (i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
  - (ii) The territorial seas; or
  - (iii) Interstate waters;
- (2) Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;
- (3) Tributaries of waters identified in paragraph (a)(1) or (2) of this section that are relatively permanent, standing or continuously flowing bodies of water
- (4) Wetlands adjacent to the following waters
  - (i) Waters identified in paragraph (a)(1) of this section, or
  - (ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3) of this section and with a continuous surface connection to those waters
- (5) Intrastate lakes and ponds not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of

water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section

Features currently **excluded** from identification as WOTUS include:

- Interstate wetlands.
- Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the CWA.
- Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with the EPA.
- Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water.
- Artificially irrigated areas that would revert to dry land if the irrigation ceased.
- Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.
- Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons.
- Water-filled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel, unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of WOTUS.
- Swales and erosional features (e.g., gullies, small washes) characterized by low-volume, infrequent, or short-duration flow.

On July 24, 2020, the USACE and EPA issued a joint memorandum superseding Regulatory Guidance Letter 07-02 and clarifying that the construction and maintenance of irrigation ditches and the maintenance of drainage ditches are excluded from regulation under CWA Section 404.

Given the substantial changes in operable definitions that have occurred and are likely to continue considering recent regulatory revisions and court actions, it is not possible to predict the regulations that will be in place at the time of a particular jurisdictional determination by the USACE. This JD focuses on identifying the boundaries of potentially jurisdictional water bodies, using methods for determining the locations of the ordinary high water mark (OHWM) and wetland boundaries as described below. These methods for determining the boundaries of water bodies in general have not substantially changed over the years and are not likely to change with any revised regulations.



This JD can then be used in combination with a companion jurisdictional analysis to determine which of the identified water bodies are actually jurisdictional, based on the definition in effect at the time of a jurisdictional determination by the USACE.

The USACE typically considers any body of water displaying an OHWM for designation as WOTUS, subject to the applicable definition of WOTUS. USACE jurisdiction over nontidal WOTUS extends laterally to the OHWM or beyond the OHWM to the limit of any contiguous wetlands, if present.

The OHWM is defined as “that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area” (33 CFR 328.3). Jurisdiction typically extends upstream to the point where the OHWM is no longer perceptible.

Waters found to be isolated and not subject to CWA regulation may still be regulated by the RWQCB under the State’s Porter-Cologne Act.

### Nonwetland Waters of the United States

Nonwetland WOTUS contain the elements described above under USACE jurisdiction but do not possess the three wetland characteristics required to be considered a wetland WOTUS as described below: hydrophytic vegetation, hydric soils, and wetland hydrology.

### Wetland Waters of the United States

Wetland delineations for Section 404 purposes must be conducted according to the geographic specific regional supplement, the USACE’s *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0) (Regional Supplement) (USACE 2008), and the *Corps of Engineers 1987 Wetlands Delineation Manual* (1987 Manual) (USACE 1987). Where there are differences between the two documents, the Regional Supplement takes precedence over the 1987 Manual.

The USACE and the EPA define wetlands as:

Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions.

To be considered a jurisdictional wetland under Section 404, an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Each characteristic has a specific set of mandatory wetland criteria that must be satisfied for that particular wetland characteristic to be met. Several indicators may be analyzed to determine whether the criteria are satisfied.

Hydrophytic vegetation and hydric soil indicators provide evidence that episodes of inundation have lasted more than a few days or have occurred repeatedly over a period of years, but they do not confirm that an episode has occurred recently. Conversely, wetland hydrology indicators provide evidence that an episode of inundation or soil saturation occurred recently but do not provide evidence that episodes lasted more than a few days or occurred repeatedly over a period of years. Because of this, if an area lacks one of the three characteristics under normal circumstances, the area is considered nonwetland under most circumstances.

Determination of wetland limits may be obfuscated by a variety of natural environmental factors or human activities, collectively called difficult wetland situations, including cyclic periods of drought and flooding, or in areas recently altered by anthropogenic activities. During periods of drought, for example, bank return flows are reduced and water tables are lowered. This results in a corresponding lowering of the OHWM and invasion of upland plant species into wetland areas. Per the *Sackett* Supreme Court ruling, wetlands must have a continuous surface connection to another WOTUS to be considered an adjacent wetland.

Conversely, extreme flooding may create physical evidence of high water well above what might be considered ordinary and may allow the temporary invasion of hydrophytic species into nonwetland areas. In highly ephemeral systems typical of Southern California, these problems are encountered frequently. In these situations, professional judgment based on years of practical experience and extensive knowledge of local ecological conditions comes into play in delineating wetlands. The *Regional Supplement* provides additional guidance for difficult wetland situations.

### Hydrophytic Vegetation

Hydrophytic vegetation is plant life that grows and is typically adapted for life in permanently or periodically saturated soils. The hydrophytic vegetation criterion is met if more than 50 percent of the dominant plant species from all strata (tree, shrub, herb, and woody vine layers) are considered hydrophytic. Hydrophytic species are those included on the National Wetland Plant List published by the USACE (2022). Each species on the list is rated according to a wetland indicator category, as shown below in Table A.

**Table A: Hydrophytic Vegetation Ratings**

Category	Rating <sup>1</sup>	Probability
Obligate Wetland	OBL	Almost always occur in wetlands (estimated probability greater than 99%)
Facultative Wetland	FACW	Usually occur in wetlands (estimated probability 67–99%)
Facultative	FAC	Equally likely to occur in wetlands and nonwetlands (estimated probability 34–66%)
Facultative Upland	FACU	Usually occur in nonwetlands (estimated probability 67–99%)
Obligate Upland	UPL	Almost always occur in nonwetlands (estimated probability greater than 99%)

Source: *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0) (USACE 2008).

<sup>1</sup> Species not currently rated (N/L) are considered Obligate Upland (UPL).

To be considered hydrophytic, the species must have wetland indicator status (i.e., be rated as Obligate Wetland [OBL], Facultative Wetland [FACW], or Facultative [FAC]).

The delineation of hydrophytic vegetation is typically based on the most dominant species from each vegetative stratum (strata are considered separately); when more than 50 percent of these dominant species are hydrophytic (i.e., FAC, FACW, or OBL), the vegetation is considered hydrophytic. In particular, the USACE recommends the use of the “50/20” rule (also known as the dominance test) from the *Regional Supplement* for determining dominant species. Under this method, dominant species are the most abundant species that immediately exceed 50 percent of the total dominance measure for the stratum, plus any additional species comprising 20 percent or more of the total dominance measure for the stratum. In cases where indicators of hydric soil and wetland hydrology are present but the vegetation initially fails the dominance test, the prevalence index must be used. The prevalence index is a weighted average of all plant species within a sampling point. The prevalence index is particularly useful when communities only have one or two dominants, where species are present at roughly equal coverage, or when strata differ greatly in total plant cover. In addition, the USACE guidance provides that morphological adaptations may be considered when determining hydrophytic vegetation when indicators of hydric soil and wetland hydrology are present (USACE 2008). If the plant community passes either the dominance test or prevalence index after reconsidering the indicator status of any plant species that exhibits morphological adaptations for life in wetlands, then the vegetation is considered hydrophytic.

### Hydric Soils

Hydric soils<sup>1</sup> are defined as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part.<sup>2</sup> Soils are considered likely to meet the definition of a hydric soil when they meet one or more of the following criteria:

1. All Histels except Folistels and Histosols except Folists;
2. Soils that are frequently ponded for a long duration or very long duration<sup>3</sup> during the growing season; and/or
3. Soils that are frequently flooded for a long duration or very long duration during the growing season.

Hydric soils develop under conditions of saturation and inundation combined with microbial activity in the soil that causes a depletion of oxygen. Although saturation may occur at any time of year, microbial activity is limited to the growing season, when soil temperature is above biologic zero (the soil temperature at a depth of 50 centimeters [19.7 inches], below which the growth and function of locally adapted plants are negligible). Biogeochemical processes that occur under anaerobic conditions during the growing season result in the distinctive morphologic characteristics of hydric soils. Based on these criteria and on information gathered from the National Soil

<sup>1</sup> The hydric soils definition and criteria included in the 1987 Manual are obsolete. Users of the 1987 Manual are directed to the United States Department of Agriculture’s Natural Resources Conservation Service website for the most current information on hydric soils.

<sup>2</sup> Current definition as of 1994 (*Federal Register*, July 13, 1994).

<sup>3</sup> “Long duration” is defined as a single event ranging from 7 to 30 days; “very long duration” is defined as a single event that lasts longer than 30 days.



Information System database, the United States Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) created a Soil Data Access Hydric Soils List that is updated annually.

The Regional Supplement has a number of field indicators that may be used to identify hydric soils. The NRCS (USDA 2016) has also developed a number of field indicators that may demonstrate the presence of hydric soils. These indicators include hydrogen sulfide generation, accumulation of organic matter, and reduction, translocation, and/or accumulation of iron and other reducible elements. These processes result in soil characteristics that persist during both wet and dry periods. Separate indicators have been developed for sandy soils and for loamy and clayey soils.

### *Wetland Hydrology*

Under natural conditions, development of hydrophytic vegetation and hydric soils is dependent on a third characteristic: wetland hydrology. Areas with wetland hydrology are those where the presence of water has an overriding influence on vegetation and soil characteristics due to anaerobic and reducing conditions, respectively (USACE 1987). The wetland hydrology criterion is satisfied if the area is seasonally inundated or saturated to the surface for a minimum of 14 consecutive days during the growing season in most years (USACE 2008).

Hydrology is often the most difficult criterion to measure in the field due to seasonal and annual variations in water availability. Some of the indicators commonly used to identify wetland hydrology include visual observation of inundation or saturation, watermarks, recent sediment deposits, surface scour, and oxidized root channels (rhizospheres) resulting from prolonged anaerobic conditions.

### *Deepwater Aquatic Habitat*

Deepwater aquatic habitats are areas that are permanently inundated at mean annual water depths greater than 6.6 ft or permanently inundated areas less than 6.6 ft in depth that do not support rooted-emergent or woody plant species.<sup>4</sup> Deepwater aquatic waters do not qualify as wetland waters due to the lack of hydrophytic terrestrial vegetation. Deepwater aquatic waters are recognized as having a high habitat value due to their use as a fish and wildlife resource and limited distribution in the Arid West region.

## **CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE**

The CDFW, through provisions of the California Fish and Game Code (Section 1600 et seq.), is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. Streams (and rivers) are defined by the presence of a channel bed and banks and at least a periodic or intermittent flow of water. The CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by the CDFW.

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<sup>4</sup> Areas less than 6.6 feet mean annual depth that support only submergent aquatic plants are vegetated shallows, not wetlands.

CDFW has various definitions and descriptions of the terms “channel bed” and “banks.” The following definitions are taken from Appendix C: Legal Opinions of CDFW’s *A Field Guide to Lake and Streambed Alteration Agreements Sections 1600–1607, California Fish and Game Code* (CDFW 1994) to characterize the bed and bank:

The extent of a stream bed and banks can be measured by several means: (1) flood plain, depending on the return frequency considered and if the riparian vegetation is present in the flood plain; (2) the outer edge of riparian vegetation used as a line of demarcation; (3) the bank, channel, or levee that confines flows; and (4) the extent of riparian vegetation outside of a levee.

The following concepts are also described in *A Field Guide to Lake and Streambed Alteration Agreements*, prepared by the CDFW Environmental Services Division in January 1994:

Streams can include intermittent ephemeral streams, dry washes, canals, aqueducts, irrigation ditches if they support aquatic life, riparian vegetation, or seasonally stream-dependent terrestrial wildlife, such as amphibians.

Natural attributes or biological components of a stream include aquatic and riparian vegetation, and all aquatic animals, including fish, amphibians, reptiles, invertebrates, and terrestrial species, which derive benefits from the stream system.

The CDFW regulates wetland areas only to the extent that those wetlands are a part of a river, stream, or lake as defined by the CDFW. CDFW jurisdiction typically extends beyond the streambed/banks to the limits of the riparian vegetation (if present) associated with streams, rivers, or lakes.

In obtaining CDFW agreements, the limits of wetlands are not typically determined. This is because the CDFW generally includes, within the jurisdictional limits of streams and lakes, any riparian habitat present to the outer edge if it is wider than the top of the bank. Riparian habitat includes willows (*Salix* spp.), mule fat (*Baccharis salicifolia*), and other vegetation typically associated with the banks of a stream or lake shorelines and may not be consistent with USACE definitions. In most situations, wetlands associated with a stream or lake would fall within the limits of riparian habitat. Thus, defining the limits of CDFW jurisdiction based on riparian habitat will automatically include any wetland areas and may include additional areas that do not meet USACE criteria for soils and/or hydrology (e.g., where riparian woodland canopy extends beyond the banks of a stream, away from frequently saturated soils).

## STATE WATER RESOURCES CONTROL BOARD/REGIONAL WATER QUALITY CONTROL BOARD

The Porter-Cologne Act of the California Water Code (§ 13000 et seq.) established nine RWQCBs to oversee water quality on a day-to-day basis at the local and/or regional level. Their duties include preparing and updating water quality control plans and associated requirements, and issuing water quality certifications under Section 401 of the CWA. The CWA grants ultimate authority to the State Water Resources Control Board (SWRCB) over State water rights and water quality policy. Under the Porter-Cologne Act, the RWQCBs (or the SWRCB for projects that cross multiple RWQCB

jurisdictions) are responsible for issuing National Pollutant Discharge Elimination System (NPDES) permits for point-source discharges and waste discharge requirements for nonpoint-source discharges into jurisdictional waters of the State (WOTS).

The definition of waters of the State is broad and includes any surface water or groundwater, including saline waters, within the boundaries of the State (California Water Code 13050(e)). Waters that meet the definition of WOTUS are also considered WOTS, but the jurisdictional limits of WOTS may extend beyond the limits of WOTUS. Isolated waters that may not be subject to regulations under federal law are considered to be WOTS and regulated accordingly.

While there is no formal statewide guidance for the delineation of nonwetland WOTS, jurisdiction generally corresponds to the surface area of aquatic features that are at least seasonally inundated as well as all areas within the banks of defined rivers, streams, washes, and channels, including associated riparian vegetation. Currently, each RWQCB reserves the right to establish criteria for the regulation of nonwetland WOTS.

### Wetland Waters of the State

On August 28, 2019, the California Office of Administrative Law approved the SWRCB-proposed *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (Procedures). The Procedures, effective on May 28, 2020, apply to discharges of dredged or fill material to WOTS. The Procedures consist of four major elements: (1) a wetland definition, (2) a framework for determining whether a feature that meets the wetland definition is a water of the State, (3) wetland delineation procedures, and (4) procedures for the submission, review, and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities.

The SWRCB and the RWQCBs define a wetland as stated below:

An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

The RWQCB will rely on the final aquatic resource report verified by the USACE for determining the extent of wetland WOTUS. However, if it is not delineated in a final aquatic report, the procedures will use the USACE 1987 Manual and the Regional Supplement to determine whether the area meets the State definition of a wetland. As described in the 1987 Manual and the Regional Supplement, an area "lacks vegetation" if it has less than 5 percent areal coverage of plants at the peak of the growing season. The methods shall be modified only to allow for the fact that the lack of vegetation does not prevent the determination of such an area that meets the State definition of wetland.



## METHODOLOGY

Prior to conducting delineation fieldwork, the following literature and materials were reviewed:

- Historic and current aerial photographic imagery (NETR 2025; Google 2025);
- Historic and current USGS topographic maps (USGS 2025);
- United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) wetland mapper (USFWS 2025); and
- NRCS Web Soil Survey (USDA 2025).

Prior to conducting the delineation fieldwork, LSA biologists used recent, high-resolution aerial photographic imagery to identify potential jurisdictional features in the JDSA. LSA Biologists Carla Cervantes, Denise Woodard, and Christina Van Oosten conducted the JD fieldwork along the JDSA of SR-74 on June 13, July 7, August 20 and 27, and September 2, 2025. During all the fieldwork, the JDSA was visually surveyed on foot.

All features within the JDSA were evaluated according to the most current federal and/or State regulatory criteria and guidance and mapped using aerial photographs. This included the State wetland definition and delineation procedures recently enacted by the SWRCB, as well as the current USACE regulations pertaining to jurisdictional WOTUS, which are consistent with the final 2023 rule until further notice. In addition, the general conditions and characteristics associated with each drainage feature were noted and documented with photographs of representative conditions.

Areas of potential jurisdiction observed within the JDSA during the fieldwork were mapped on a recent, high-resolution aerial photograph (scale of 1 inch = approximately 200 ft) and/or on ESRI's Field Maps mobile application showing the JDSA. The widths and lengths of these features mapped during the course of the field investigation were determined by a combination of direct measurements taken in the field and measurements taken from the aerial photographs.

## SURVEY LIMITATIONS

Physical access for delineation purposes was precluded in some areas within the JDSA due to the presence of fences and no means of access. However, the physical conditions and resources present in these areas where access was precluded were readily visible through the chain-link and barbed-wire fences. In these cases, channel widths were near enough to be visually estimated in the field and, to the extent possible, confirmed using high-resolution aerial imagery. In addition, despite the inability to directly observe and analyze soil characteristics and subsurface hydrology in those areas where physical access was precluded, the soils were assumed to satisfy the wetland soils parameter where hydrophytic vegetation was clearly prevalent and where some indication of wetland hydrology was visibly evident or reasonably suspected. Consequently, no soil samples were taken, and wetlands were assumed to be present in these areas and were limited to the lower San Juan Creek within the JDSA.

## RESULTS

### NATIONAL WETLANDS INVENTORY

The NWI query identified four different feature types within the JDSA (Figure 3), including one wetland and three riverine feature types (USFWS 2025). See Table B, below.

**Table B: Mapped National Wetlands Inventory Classifications**

Numerical Code	General Description	Classification Code	Location
PSS/USA	Freshwater Forested/ Shrub Wetland	Palustrine (P), Scrub-Shrub (SS), Unconsolidated Shore (US), Temporarily Flooded (A)	San Juan Creek
R2UBHx	Riverine	Riverine (R), Lower Perennial (2), Unconsolidated Bottom (UB), Permanently Flooded (H), Excavated (x)	San Juan Creek
R4SBC	Riverine	Riverine (R), Intermittent (4), Streambed (SB), Seasonally Flooded (C)	San Juan Creek (south)
			Unnamed feature between Gateway Place and Radio Tower Road
			2 unnamed features between Radio Tower Road and Cristianitos Road
			2 unnamed features between Cristianitos Road and Clay Pile Road
			1 unnamed feature between Nieblas Road and Dove Flats Road
			4 unnamed features between Ranch Carrillo Road and Lucas Canyon Road
			San Juan Creek (north)
			3 unnamed features between San Juan Creek and the eastern project limit
R2USA	Riverine	Riverine (R), Lower Perennial (2), Unconsolidated Shore (US), Temporarily Flooded (A)	Along San Juan Creek between Clay Pile Road and Nieblas Road

Source: United States Fish and Wildlife Service (2025).

### USDA SOIL SURVEY

Soils within the JDSA (Figure 4) were mapped using the NRCS Web Soil Survey classifications (USDA 2025b). One soil within the JDSA, Riverwash, is mapped as hydric. See Table C, below.

**Table C: Mapped Soils Classifications**

Soil Number	Soil (Map Unit Symbol)	Drainage Class	Frequency of Flooding	Frequency of Ponding	Hydric Soil Rating
101	Alo clay, 15 to 30 percent slopes, dry	Well drained	None	None	No
127	Bosanko clay, 15 to 30 percent slopes	Well drained	None	None	No
128	Bosanko clay, 30 to 50 percent slopes	Well drained	None	None	No
130	Bosanko-Balcom complex, 30 to 50 percent slopes	Well drained	None	None	No
131	Botella loam, 2 to 9 percent slopes, warm MAAT, lower MAP, MLRA 19	Well drained	None	None	No
132	Botella clay loam, 2 to 9 percent slopes, warm MAAT, MLRA 19	Well drained	None	None	No
134	Calleguas clay loam, 50 to 75 percent slopes, eroded	Well drained	None	None	No
135	Capistrano sandy loam, 2 to 9 percent slopes	Well drained	None	None	No
136	Capistrano sandy loam, 9 to 15 percent slopes	Well drained	None	None	No
142	Cieneba sandy loam, 30 to 75 percent slopes, eroded	Somewhat excessively drained	None	None	No
146	Corralitos loamy sand	Somewhat excessively drained	None	None	No
152	Exchequer-Rock outcrop complex, 30 to 75 percent slopes	Somewhat excessively drained	None	None	No
169	Modjeska gravelly loam, 2 to 9 percent slopes	Well drained	None	None	No
170	Modjeska gravelly loam, 9 to 15 percent slopes	Well drained	None	None	No
173	Myford sandy loam, 2 to 9 percent slopes	Moderately well drained	None	None	No
175	Myford sandy loam, 9 to 15 percent slopes	Moderately well drained	None	None	No
178	Myford sandy loam, thick surface, 0 to 2 percent slopes	Moderately well drained	None	None	No
191	Riverwash	-	-	-	Yes
193	San Andreas sandy loam, 15 to 30 percent slopes, warm MAAT, MLRA 20	Well drained	None	None	No
197	Soboba gravelly loamy sand, 0 to 5 percent slopes	Excessively drained	None	None	No
198	Soboba cobbly loamy sand, 0 to 15 percent slopes	Excessively drained	None	None	No
200	Soper loam, 30 to 50 percent slopes	Well drained	None	None	No
201	Soper gravelly loam, 15 to 30 percent slopes, MLRA 20	Well drained	None	None	No
204	Soper-Rock outcrop complex, 30 to 75 percent slopes	Well drained	None	None	No
207	Sorrento loam, 2 to 9 percent slopes, warm MAAT, MLRA 19	Well drained	None	None	No
208	Sorrento clay loam, 0 to 2 percent slopes, warm MAAT, MLRA 19	Well drained	None	None	No
209	Sorrento clay loam, 2 to 9 percent slopes, warm MAAT, MLRA 19	Well drained	None	None	No
221	Yorba gravelly sandy loam, 2 to 9 percent slopes	Well drained	None	None	No
223	Yorba gravelly sandy loam, 15 to 30 percent slopes	Well drained	None	None	No
224	Yorba cobbly sandy loam, 9 to 30 percent slopes	Well drained	None	None	No
226	Yorba cobbly sandy loam, 30 to 50 percent slopes	Well drained	None	None	No

Source: USDA NRCS Web Soil Survey Version 3.4.0 (2025b).

MAAT = mean annual air temperature

NRCS = Natural Resources Conservation Service

MLRA = major land resource area

USDA = United States Department of Agriculture



## DESCRIPTIONS OF DELINEATED FEATURES

A total of 35 features were delineated within the JDSA. These delineated features fit into one of four general categories identified below (i.e., earthen drainages, earthen areas, concrete drainages, and culvert only). A brief description of the delineated features within the applicable feature category is provided below. Figure 6, Representative Site Photographs, provides representative photos of some of these features.

### Earthen Drainages

There are 22 drainage features within the JDSA (Features 4, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, and 30) that are entirely earthen drainages and lack riparian vegetation except for Features 8, 10, 14, 18, 20, 21, 22, and 30. Additionally, 1 drainage feature within the JDSA (Feature 1) is partially concrete and earthen drainage and also lacks riparian vegetation. These 23 features are discussed below.

- **Feature 1** is a partially concrete lined and partially soft bottomed, trapezoidal drainage channel constructed as part of the stormwater drainage system for I-5 and SR-74. This feature flows into a storm drain north of the JDSA and may eventually flow indirectly to San Juan Creek. The portion of the feature within the JDSA is approximately 924 linear feet (LF), with an average width of 4 ft. Flows within the feature are ephemeral as flowing water was absent at the time of the delineation. The concrete portions of Feature 1 are devoid of vegetation. The soft-bottomed portion of the feature is devoid of hydrophytic vegetation and is dominated by ruderal vegetation. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. .
- **Feature 4** is an earthen drainage channel constructed as part of the stormwater drainage system for I-5 that flows into a storm drain at the southern end of the feature and may convey flows indirectly to San Juan Creek. The portion of the feature within the JDSA is approximately 179 LF, with an average width of 4 ft. This feature drains into a grated storm drain. Flows within the feature are ephemeral as flowing water was absent at the time of the delineation. This feature is devoid of hydrophytic vegetation and is dominated by ruderal vegetation. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. Feature 4 exhibits a 4 ft wide OHWM and streambed.
- **Feature 8** is San Juan Creek, a naturally occurring, earthen creek that conveys flows west from the Santa Ana Mountains, terminating at the Pacific Ocean. The portion of the feature within the JDSA is approximately 2,420 LF, with an average width of 1,856 ft. Flows within the feature are perennial as flowing water was present within a low-flow channel at the time of the delineation. Hydric soils are assumed to be present. The soil within Feature 8 is mapped by the NRCS Web Soil Survey classifications (USDA 2025b) as Riverwash, which is rated as hydric. Feature 8 exhibits an approximately 170 ft wide OHWM and streambed. It contains western sycamore riparian vegetation dominated by willows, which are hydrophytic (FACW) plant species.
- **Feature 9** is an earthen, riprap-lined, concave catch basin constructed as part of the stormwater drainage system for SR-74. It conveys flows south of SR-74. Flows within the feature are

ephemeral as flowing water was absent at the time of the delineation. The feature is devoid of hydrophytic vegetation and is dominated by nonnative grassland vegetation. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. Feature 9 has a 16 ft wide OHWM and streambed.

- **Feature 10** is an earthen drainage channel that drains from an aboveground corrugated metal pipe culvert. It was constructed as part of the stormwater drainage system for SR-74 and conveys flows south of SR-74. The portion of the feature within the JDSA is approximately 7 LF, with an average width of 2 ft. Flows within the feature are ephemeral as flowing water was absent at the time of the delineation. The feature is devoid of hydrophytic vegetation and is dominated by ruderal vegetation. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. Feature 10 originates from an 18-inch-diameter culvert that flows into Feature 9 and exhibits a 2 ft wide OHWM and streambed.
- **Feature 11** is an earthen drainage channel constructed as part of the stormwater drainage system for SR-74. This drain originates from an 18-inch-diameter culvert, flows into Feature 12, and may convey runoff indirectly to San Juan Creek. The portion of the feature within the JDSA is approximately 15 LF with an average width of 2 ft. Flows within the feature are ephemeral as flowing water was absent at the time of the delineation. The feature is devoid of hydrophytic vegetation and is dominated by ruderal vegetation. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. Feature 11 exhibits a 2 ft wide OHWM and streambed.
- **Feature 12** is an earthen drainage channel constructed as part of the stormwater drainage system for SR-74 and conveys runoff from the freeway. This drain originates from an 18-inch-diameter culvert, flows into Feature 13, and may indirectly flow into San Juan Creek. The portion of the feature within the JDSA is approximately 20 LF, with an average width of 2 ft. Flows within the feature are ephemeral, as flowing water was absent at the time of the delineation. The feature is devoid of hydrophytic vegetation and is dominated by ruderal vegetation. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. Feature 12 exhibits a 2 ft wide OHWM and streambed.
- **Feature 14** is an earthen drainage channel constructed as part of the stormwater drainage system for SR-74. It conveys runoff south of SR-74. Feature 14 originates south of SR-74 and travels through a 3 ft diameter culvert under SR-74, continuing to the south. The portion of the feature within the JDSA is approximately 23 LF, with an average width of 3 to 6 ft. Flows within the feature are ephemeral, as flowing water was absent at the time of the delineation. The feature is devoid of hydrophytic vegetation and is dominated by ruderal vegetation. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. Feature 14 exhibits up to a 6 ft wide OHWM and streambed. Feature 14 flows downslope into an earthen drain and eventually into San Juan Creek.

- **Feature 15** is an earthen drainage channel that drains from a corrugated metal pipe culvert. It was constructed as part of the stormwater drainage system for SR-74 and conveys flows south of SR-74. The portion of the feature within the JDSA is approximately 9 LF, with an average width of 2 ft. Flows within the feature are ephemeral as flowing water was absent at the time of the delineation. The feature is devoid of hydrophytic vegetation and is dominated by ruderal vegetation. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. Feature 15 originates from an 18-inch-diameter culvert and exhibits a 2 ft wide OHWM and streambed. Feature 15 flows into an undeveloped area north of the JDSA.
- **Feature 16** is an earthen drainage channel that drains from a 2 ft diameter culvert with a concrete apron. It was constructed as part of the stormwater drainage system for SR-74 and conveys flows south of SR-74. The portion of the feature within the JDSA is approximately 22 LF, with an average width of 2.5 ft. Flows within the feature are ephemeral, as flowing water was absent at the time of the delineation. The feature is devoid of hydrophytic vegetation and is dominated by ruderal vegetation. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. Feature 16 exhibits a 2.5 ft wide OHWM and streambed. Feature 16 flows into an undeveloped area north of the JDSA.
- **Feature 17** is an earthen drainage channel constructed as part of the stormwater drainage system for SR-74. The stormwater from this drainage flows into an undeveloped area north of the JDSA and may convey runoff indirectly to San Juan Creek. Feature 17 originates from a 2 ft diameter culvert that drains to the north. The portion of the feature within the JDSA is approximately 17 LF, with an average width of 3 ft. Flows within the feature are ephemeral, as flowing water was absent at the time of the delineation. The feature is devoid of hydrophytic vegetation and is dominated by ruderal vegetation. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. Feature 17 exhibits a 3 ft wide OHWM and streambed.
- **Feature 18** is an earthen drainage channel constructed as part of the stormwater drainage system for SR-74. The stormwater from this drainage flows into an undeveloped area north of the JDSA and may convey runoff indirectly to San Juan Creek. Feature 18 originates south of SR-74 and travels through a 3 ft diameter culvert under SR-74, continuing to the north. The portion of the feature within the JDSA is approximately 31 LF, with an average width of 2.5 ft. Flows within the feature are ephemeral as flowing water was absent at the time of the delineation. The feature is devoid of hydrophytic vegetation and occurs within chaparral vegetation. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. Feature 18 exhibits a 2.5 ft wide OHWM and streambed.
- **Feature 19** is an earthen drainage channel constructed as part of the stormwater drainage system for SR-74. The stormwater from this drainage flows into Feature 20 north of the JDSA and may convey runoff indirectly to San Juan Creek. Feature 19 originates from a 2 ft diameter culvert that drains to the north. The portion of the feature within the JDSA is approximately 11 LF, with an average width of 2 ft. Flows within the feature are ephemeral, as flowing water



was absent at the time of the delineation. The feature is devoid of hydrophytic vegetation and is dominated by ruderal vegetation. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. Feature 19 exhibits a 2 ft wide OHWM and streambed.

- **Feature 20** is an earthen drainage channel that flows from an 8 x 8 ft concrete box culvert under SR-74. The undercrossing catches nuisance flow from the south side of SR-74 and conveys flows northerly into Feature 20, which conveys flows downslope into an earthen drain and eventually into San Juan Creek. The portion of the feature within the JDSA is approximately 73 LF, with an average width of 13 ft. Flows within the feature are ephemeral as flowing water was absent at the time of the delineation. The feature is devoid of hydrophytic vegetation and contains ruderal vegetation. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. Feature 20 exhibits a 13 ft wide OHWM and streambed.
- **Feature 21** is an earthen drainage channel constructed as part of the stormwater drainage system for SR-74. This drain flows into Feature 22 north of the JDSA and may convey runoff indirectly to San Juan Creek. The portion of the feature within the JDSA is approximately 10 LF, with an average width of 2 ft. Flows within the feature are ephemeral, as flowing water was absent at the time of the delineation. The feature is devoid of hydrophytic vegetation and contains ruderal vegetation. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. Feature 21 exhibits a 2 ft wide OHWM and streambed.
- **Feature 22** is a 12 ft concrete box culvert. There is an earthen drainage channel on either side of the culvert. This feature was constructed as part of the stormwater drainage system for SR-74 and conveys flows downslope into an earthen drain and may eventually flow into San Juan Creek. Feature 22 originates south of SR-74 and travels through the 12 ft concrete box culvert under SR-74, continuing to the north. The portion of the feature within the JDSA is approximately 43 LF, with an average width of 12 ft. Flows within the feature are ephemeral, as flowing water was absent at the time of the delineation. The feature is devoid of hydrophytic vegetation and contains ruderal vegetation with an overstory of coast live oak woodland on the north. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. Feature 22 exhibits a 12 ft wide OHWM and streambed.
- **Feature 23** is an earthen drainage channel constructed as part of the stormwater drainage system for SR-74. It conveys flows downslope into an earthen drain and may eventually flow into San Juan Creek. Feature 23 originates from a 2 ft diameter culvert and conveys flows to the north. The portion of the feature within the JDSA is approximately 20 LF, with an average width of 3 ft. Flows within the feature are ephemeral, as flowing water was absent at the time of the delineation. The feature is devoid of hydrophytic vegetation and contains ruderal vegetation. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. Feature 23 exhibits a 2 ft wide OHWM and streambed.

- **Feature 24** is an earthen drainage channel constructed as part of the stormwater drainage system for SR-74. The stormwater from this drainage flows into an undeveloped area north of the JDSA and may convey runoff indirectly to San Juan Creek. Feature 24 originates south of SR-74 and travels through a 2 ft diameter culvert under SR-74, continuing to the north. The portion of the feature within the JDSA is approximately 21 LF, with an average width of 1 ft. Flows within the feature are ephemeral, as flowing water was absent at the time of the delineation. The feature is devoid of hydrophytic vegetation and contains ruderal vegetation. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. Feature 24 exhibits a 1 ft wide OHWM and streambed. .
- **Feature 25** is an earthen drainage channel constructed as part of the stormwater drainage system for SR-74. Feature 25 originates south of SR-74 and travels through a 2 ft diameter culvert under SR-74, continuing to the north. The stormwater from this drainage flows into an undeveloped area north of the JDSA and may convey runoff indirectly to San Juan Creek. The portion of the feature within the JDSA is approximately 29 LF, with an average width of 2 ft. Flows within the feature are ephemeral, as flowing water was absent at the time of the delineation. The feature is devoid of hydrophytic vegetation and contains ruderal vegetation on the north side of SR-74. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. Feature 25 exhibits a 2 ft wide OHWM and streambed.
- **Feature 26** is an earthen drainage channel constructed as part of the stormwater drainage system for SR-74. The stormwater from this drainage flows into an undeveloped area north of the JDSA and may convey runoff indirectly to San Juan Creek. Feature 26 originates from a 2 ft diameter culvert and runs parallel to the south side of SR-74. The portion of the feature within the JDSA is approximately 128 LF, with an average width of 4 ft. Flows within the feature are ephemeral, as flowing water was absent at the time of the delineation. The feature lacks hydrophytic vegetation and contains ruderal vegetation. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. Feature 26 exhibits a 2 ft wide OHWM and streambed.
- **Feature 27** is a natural, earthen drainage channel and conveys runoff directly to San Juan Creek. Feature 27 originates south of SR-74, travels through a 12 ft diameter corrugated metal pipe with concrete apron, and drains under SR-74, continuing to the north. The portion of the feature within the JDSA is approximately 43 LF, with an average width of 13 ft. Flows within the feature are ephemeral, as flowing water was absent at the time of the delineation. The feature is devoid of hydrophytic vegetation and is incised and devoid of vegetation. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. Feature 27 exhibits a 12 ft wide OHWM and streambed.
- **Feature 28** is an earthen, drainage channel constructed as part of the stormwater drainage system for SR-74. The stormwater from this drainage flows into an undeveloped area west of the JDSA and may convey runoff indirectly to San Juan Creek. Feature 28 originates from a 2 ft diameter culvert and runs parallel to the south side of SR-74. The portion of the feature within the JDSA is approximately 49 LF, with an average width of 2 feet. Flows within in the feature are

ephemeral, as flowing water was absent at the time of the delineation. The feature lacks hydrophytic vegetation and contains ruderal vegetation. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. Feature 28 exhibits a 2 ft wide OHWM and streambed.

- **Feature 30** is San Juan Creek, a naturally occurring creek that conveys flows west from the Santa Ana Mountains, terminating at the Pacific Ocean. This portion of San Juan Creek is earthen, originates east of SR-74, and flows in a southwest direction under a SR-74 bridge. The portion of the feature within the JDSA is approximately 66 LF, with an average width of 180 ft. Flows within the feature are intermittent, as flowing water was present at the time of the initial delineation field work, but no water was present during subsequent delineation field visits. Although no soil samples were taken, hydric soil is assumed to be present. The soils within Feature 29 are mapped by the NRCS Web Soil Survey classifications (USDA 2025b) as Riverwash, which is rated as hydric. Feature 30 is primarily unvegetated within the OHWM, but it does contain riparian vegetation in the form of western sycamore (FAC) and mule fat (FAC) as well as laurel sumac (*Malosma laurina*; Obligate Upland [UPL]) outside the OHWM within the streambed. Feature 30 exhibits an approximate 105 ft wide OHWM and a 166 ft wide streambed.

### Earthen Areas

There are two features within the JDSA (Features 31 and 32) that are entirely earthen, lack riparian vegetation and a channel, and therefore cannot be classified as drainages. These two features are discussed below.

- **Feature 31** is an earthen area constructed as part of the stormwater drainage system for SR-74. Feature 31 originates south of SR-74, where expected sheet flows and runoff from SR-74 travel through a 2 ft diameter culvert under SR-74 and continuing to the north, dissipating into an undeveloped upland area of the JDSA. There are no evident flows at this feature, and flowing water was absent at the time of the delineation. The feature lacks hydrophytic vegetation and contains ruderal vegetation. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. Feature 31 lacks an OHWM and streambed.
- **Feature 32** is an earthen area constructed as part of the stormwater drainage system for SR-74. Feature 32 originates south of SR-74, where expected sheet flows and runoff from SR-74 travel through a 2 ft diameter culvert under SR-74 and continue to the north, dissipating into an undeveloped upland area of the JDSA. There are no evident flows at this feature, and flowing water was absent at the time of the delineation. The feature lacks hydrophytic vegetation and contains ruderal vegetation. The soil within the feature is not saturated or flooded, and it does not pond long enough during the growing season to develop anaerobic conditions. Feature 32 lacks an OHWM and streambed.

### Concrete Drainages

There are seven drainage features within the JDSA (Features 2, 3, 5, 6, 7, 13, and 29) that are entirely concrete-lined drainages constructed on dry land for the purpose of capturing, controlling,



and/or conveying urban and/or stormwater runoff away from SR-74. Some of these features did contain some scattered sediment, vegetative litter, and occasionally some trash/debris that had washed into the drainages from previous storm events. There was no vegetation growing directly in these drainage features unless noted below.

- **Feature 2** is a concrete, rectangular drainage channel constructed as part of the stormwater drainage system for I-5 and SR-74. The portion of the feature within the JDSA is approximately 139 LF, with an average width of 19 ft. Feature 2 is divided into two separate segments. Segment 2a is located north of SR-74, and Segment 2b is located south of SR-74. Flows in the feature appear to be intermittent or perennial, as flowing water was present at the time of the June 2025 field visit. The stormwater from this drainage flows into a storm drainage system and may convey flows indirectly to San Juan Creek. Feature 2a exhibits a 19 ft wide OHWM and streambed, whereas Feature 2b exhibits a 19 ft wide OHWM and streambed. Minimal sediment is present within the feature, as the feature is maintained for urban and stormwater flows. Features 2a and 2b lack vegetation, including hydrophytic/riparian vegetation. Feature 2 exhibits a 19 ft wide OHWM and streambed.
- **Feature 3** is a concrete v-ditch constructed as part of the stormwater drainage system for I-5 and SR-74. The stormwater from this drainage flows into a storm drainage system and may convey flows indirectly to San Juan Creek. The portion of the feature within the JDSA is approximately 21 LF, with an average width of 1.5 ft. Flows in the feature are ephemeral, as flowing water was absent at the time of the delineation. Soils are absent from the feature, as it is concrete and maintained for stormwater flows. Feature 3 lacks vegetation, including hydrophytic/riparian vegetation. Feature 3 exhibits a 1.5 ft wide OHWM and streambed. Feature 3 lacks vegetation, including hydrophytic/riparian vegetation.
- **Feature 5** is a concrete/cobble, shallow drainage channel constructed as part of the stormwater drainage system for I-5. It sheet flows into Feature 4. The portion of the feature within the JDSA is approximately 109 LF, with an average width of 8.5 ft. Flows in the feature are ephemeral, as flowing water was absent at the time of the delineation. Soils were absent from the concrete/cobble feature. Feature 5 exhibits a 8.5 ft wide OHWM and streambed. Feature 5 lacks vegetation, including hydrophytic/riparian vegetation.
- **Feature 6** is a concrete, trapezoidal drainage channel constructed as part of the stormwater drainage system for I-5. It may convey flows directly to San Juan Creek. The portion of the feature within the JDSA is approximately 265 LF, with an average width of 8 ft. Flows in the feature are ephemeral, as flowing water was absent at the time of the delineation. Soils were absent from the concrete feature. Feature 6 lacks vegetation, including hydrophytic/riparian vegetation. Feature 6 exhibits an 8 ft wide OHWM and streambed.
- **Feature 7** is a concrete v-ditch constructed as part of the stormwater drainage system for I-5. It may convey flows indirectly via a municipal stormwater system to San Juan Creek. The portion of the feature within the JDSA is approximately 133 LF, with an average width of 8 ft. Flows in the feature are ephemeral, as flowing water was absent at the time of the delineation, although saturation was present in minor sediments within the feature. The feature is absent of

hydrophytic vegetation and is unvegetated. Soil was present in minimal amounts less than approximately 1 inch in depth within the western portion of the concrete feature. Feature 7 exhibits a 2 ft wide OHWM and an 8 ft wide streambed.

- **Feature 13** is a concrete v-ditch that catches flows from a culvert constructed as part of the stormwater drainage system. Flows from the feature are conveyed south of SR-74. The portion of the feature within the JDSA is approximately 13 LF, with an average width of 6 ft. Flows in the feature are ephemeral as flowing water was absent at the time of the delineation. Soils are absent from the feature as it is concrete and maintained for stormwater flows. Feature 13 lacks vegetation, including hydrophytic/riparian vegetation. Feature 13 exhibits a 6 ft wide OHWM and streambed.
- **Feature 29** is a concrete v-ditch constructed as part of the stormwater drainage system for SR-74. It conveys runoff directly to San Juan Creek. Standing water was present on a small portion of the feature. Soils have accumulated in small portions of the feature, although the majority of the feature lacks soils. Feature 28 originates east of SR-74 and travels through a 15 ft diameter culvert under SR-74, continuing to the west. The portion of the feature within the JDSA is approximately 370 LF, with an average width of 3 ft. Flows in the feature are intermittent, as standing water was present in a small portion of the feature at the time of the delineation. The soil accumulated within the concrete-lined drainage was saturated. Feature 29 exhibits a 3 ft wide OHWM and streambed. Feature 29 generally lacks vegetation but contains sparse occurrences of hydrophytic plants, including cattails (*Typha* sp.), rabbitfoot grass (*Polypogon monspeliensis*), and Spanish sunflower (*Pulicaria paludosa*).

### Culvert Features

There are three features within the JDSA (Features 33, 34 and 35) that are limited to a culvert within the JDSA and lack vegetation, including riparian vegetation. These three features are discussed below.

- **Feature 33** is limited to a culvert constructed as part of the stormwater drainage system for SR-74. Feature 33 originates south of SR-74, where flows travel through a 2 ft diameter culvert under SR-74, continue to the north into an undeveloped area of the JDSA, and may eventually convey indirectly to San Juan Creek. Flows within the feature are ephemeral, as flowing water was absent at the time of the delineation. Feature 33 exhibits a 2 ft wide OHWM but lacks a streambed. The feature lacks vegetation and soil as it is limited to a culvert.
- **Feature 34** is limited to a culvert constructed as part of the stormwater drainage system for SR-74. Feature 34 originates east of SR-74, where flows travel through a 2 ft diameter culvert under SR-74, continue to the west into an undeveloped area of the JDSA, and may eventually convey indirectly to San Juan Creek. Flows within the feature are ephemeral, as flowing water was absent at the time of the delineation. Feature 34 exhibits a 2 ft wide OHWM but lacks a streambed. The feature lacks vegetation and soil as it is limited to a culvert.
- **Feature 35** is limited to a culvert constructed as part of the stormwater drainage system for SR-74. Feature 35 originates north of SR-74, where flows travel through a 2 ft diameter culvert

under SR-74, continue to the south into an undeveloped area of the JDSA, and may eventually convey indirectly to San Juan Creek. Flows within the feature are ephemeral, as flowing water was absent at the time of the delineation. Feature 35 exhibits a 2 ft wide OHWM but lacks a streambed. The feature lacks vegetation and soil as it is limited to a culvert.

## JURISDICTIONAL CONCLUSIONS

A total of 35 distinct drainage features were identified within the JDSA, as shown on Figure 5. Of these, 30 were determined to be jurisdictional and 5 (i.e., Features 31 through 35) were determined to be non-jurisdictional. Corrugated drainage pipes and culvert inlets and outlets along the JDSA boundary (including Features 33 through 35) that were identified during the delineation were not determined to be jurisdictional under either Section 401 or Section 404 of the CWA, the Porter-Cologne Act, or Section 1602 of the Fish and Game Code. The regulatory basis for determining a particular water body (or feature) as jurisdictional is described below under the applicable regulatory agency.

### United States Army Corps of Engineers

#### *Jurisdictional Waters of the United States (Nonwetlands)*

Many of the drainage features identified in this JD report, particularly those features (e.g., v-ditches, and flood control channels) constructed or excavated on dry land (i.e., uplands), would not be considered WOTUS subject to jurisdiction under Sections 404 or 401 of the CWA. However, the jurisdictional determinations are made by the USACE on a case-by-case basis. See Table D for a summary of USACE jurisdictional areas within the JDSA.

Feature 8 (San Juan Creek) is a perennial creek and TNW, and contained an OHWM that included shelving, wrack lines, drift deposits, and/or visible lines on the banks. Therefore, it is a WOTUS regulated by USACE under Section 404 of the CWA. The quantities of USACE, RWQCB, and/or CDFW jurisdictional features within the JDSA are provided in Table D (provided later in the text).

Feature 30 (San Juan Creek) is an intermittent creek and TNW, and contained an OHWM that included shelving, wrack lines, drift deposits, and/or visible lines on the banks. Therefore, it is a WOTUS regulated by USACE under Section 404 of the CWA. The quantities of USACE, RWQCB, and/or CDFW jurisdictional features within the JDSA are provided in Table D (provided later in the text).

#### *Jurisdictional Waters of the United States (Wetlands)*

In addition, and as shown on Figure 6, portions of Feature 8 (San Juan Creek) also satisfy the jurisdictional wetlands criteria and, therefore, may be regulated by USACE as wetlands under Section 404 of the CWA.

### Non-Jurisdictional Features

The majority of the other delineated drainage features (i.e., Features 1 through 7, 9 through 29, and 33 through 35) shown on Figure 5 exhibited some type of OHWM, including water stains or sediment deposits on concrete or asphalt banks, as well as shelving, wrack lines, drift deposits,



and/or visible lines on the banks of earthen channels. Features 31 and 32 did not exhibit an OHWM. Furthermore, all of these drainage features, with the exception of Features 31 and 32, periodically convey stormwater runoff either directly or indirectly (via the artificially constructed, local storm drain system) to San Juan Creek, which ultimately connects to the Pacific Ocean, a TNW. Based on the final 2023 rule, Features 1 through 7, 9 through 29, and 31 through 35, do not appear to meet the definition of WOTUS per 33 CFR 328.3(b) under Sections (a)(1) through (2). Furthermore, they are not relatively permanent, do not have standing or continuously flowing water, and therefore do not meet the definitions as outlined in paragraphs (a)(3) or (a)(5). Additionally, these features are not an adjacent wetland as outlined in paragraph (a)(4).

## California Department of Fish and Wildlife

### *Jurisdictional Rivers/Streams and Associated Riparian Habitat*

In accordance with Section 1602 of the California Fish and Game Code, the CDFW asserts jurisdiction over rivers, streams, and lakes, as well as any riparian vegetation associated with those features. All but 5 of the 35 drainage features are considered jurisdictional under Section 1602 of the California Fish and Game Code due to the presence of an established bed and bank. Features 31 and 32 lack a bed and bank and are therefore not considered jurisdictional under Section 1602 of the California Fish and Game Code. Features 33 through 35 are underground culverts located under SR-74 that are not considered jurisdictional under Section 1602 of the California Fish and Game Code. In addition, Features 8 and 30 are a named creek (i.e., San Juan Creek). Of these 30 total CDFW jurisdictional features, 22 drainage features are earthen (Features 4, 8, 9, 10, 11, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, and 30), 1 feature (Feature 1) is both concrete and earthen, and 7 features (Features 2, 3, 5, 6, 7, 13, and 29) are concrete, as detailed in Table D on the following page.

The earthen drainage features coincide with existing natural drainages that convey surface water runoff from the adjacent foothills either directly or indirectly to San Juan Creek in the valley floor via concrete culverts or reinforced concrete pipes extending underneath SR-74. Because the concrete or asphalt features that coincide with or replace formerly natural drainage alignments provide water resources for wildlife, the features represent potentially regulated resources. Finally, riparian vegetation is present within features associated with San Juan Creek (Features 8 and 30) as well as a handful of other features (Features 10, 13, 14, 18, 20, 21, and 22). See Table D for a summary of CDFW jurisdictional area within the JDSA.

### *Non-jurisdictional Features*

The corrugated drainage pipes and culvert inlets and outlets along the JDSA boundaries within the JDSA (including Features 33 through 35), as well as Features 31 and 32 due to their absence of bed and bank, are not expected to be considered jurisdictional under Section 1602 of the California Fish and Game Code.

**Table D: Summary of Jurisdictional Features within the JDSA**

Feature No.	Category	USACE (acres)		RWQCB (acres)		CDFW (acres)	
		Nonwetland WOTUS	Wetland WOTUS	Nonwetland WOTS	Wetland WOTS	Streambed	Riparian Habitat
1	Earthen & Concrete	—	—	0.085	—	—	—
2	Concrete	—	—	0.097	—	0.097	—
3	Concrete	—	—	0.001	—	0.001	—
4	Earthen	—	—	0.016	—	0.016	—
5	Concrete	—	—	0.021	—	0.021	—
6	Concrete	—	—	0.048	—	0.048	—
7	Concrete	—	—	0.023	—	0.023	—
8	Earthen	0.809	0.473	0.809	0.473	0.473	0.809
9	Earthen	—	—	0.005	—	0.005	0.010
10	Earthen	—	—	0.001	—	0.001	—
11	Earthen	—	—	0.001	—	0.001	—
12	Earthen	—	—	0.001	—	0.001	—
13	Concrete	—	—	0.002	—	0.002	0.023
14	Earthen	—	—	0.002	—	0.002	0.005
15	Earthen	—	—	0.001	—	0.001	—
16	Earthen	—	—	0.001	—	0.001	—
17	Earthen	—	—	0.001	—	0.001	—
18	Earthen	—	—	0.002	—	0.002	0.012
19	Earthen	—	—	0.001	—	0.001	—
20	Earthen	—	—	0.007	—	0.007	0.007
21	Earthen	—	—	0.001	—	0.001	0.004
22	Earthen	—	—	0.012	—	0.012	0.004
23	Earthen	—	—	0.001	—	0.001	—
24	Earthen	—	—	0.001	—	0.001	—
25	Earthen	—	—	0.002	—	0.005	—
26	Earthen	—	—	0.011	—	0.011	—
27	Earthen	—	—	0.005	—	0.005	—
28	Earthen	—	—	0.004	—	0.004	—
29	Concrete	—	—	0.025	—	0.025	—
30	Earthen	0.122	—	0.122	—	0.215	0.031
<b>TOTAL</b>		<b>0.931</b>	<b>0.473</b>	<b>1.309</b>	<b>0.473</b>	<b>0.984</b>	<b>0.905</b>

Source: Compiled by LSA (2025).

CDFW = California Department of Fish and Wildlife

JDSA = Jurisdictional Delineation Study Area

RWQCB = Regional Water Quality Control Board

USACE = United States Army Corps of Engineers

WOTS = waters of the State

WOTUS = waters of the United States

## Regional Water Quality Control Board

### *Jurisdictional Waters of the State (Nonwetlands and Wetlands)*

All areas determined to be WOTUS under both current and historic USACE definitions and guidelines are also considered to be WOTS. However, RWQCB jurisdiction often extends beyond the limits of USACE jurisdiction and may also include areas not identified as subject to USACE jurisdiction.

While there are specific procedures for delineating State wetlands (SWRCB 2019), there is currently no formal statewide guidance on determining RWQCB nonwetland WOTS. Each RWQCB has the discretion to determine the occurrence and extent of jurisdictional nonwetland WOTS. Under Section 401 of the CWA, RWQCB potential jurisdiction (i.e., WOTS) would coincide with those waters that meet the USACE's current definition of WOTUS, as well as any areas that satisfy the SWRCB's definition and delineation procedures regarding State wetlands. Features 8 and 30 are considered

WOTS under Section 401 of the CWA, as these feature were determined to be WOTUS. Features 1 through 7 and 9 through 29 are considered WOTS under the Porter-Cologne Act, as these features convey ephemeral surface flows and exhibit an OHWM. As discussed above, some of these are concrete drainages, while others are earthen drainages that exhibit an OHWM, and one is a mix of both concrete and earthen. The corrugated drainage pipes and culvert inlets and outlets on the JDSA boundary are not considered jurisdictional as they do not exhibit an OHWM. There are no additional drainage features in the JDSA that exhibit an OHWM but are excluded under the current federal regulations and definition of WOTUS that might otherwise be regulated by the RWQCB as nonwetland WOTS pursuant to Section 401 of the CWA and/or the Porter-Cologne Act.

As described above under USACE jurisdiction, there are two drainage features (Features 8 and 30) that are subject to federal jurisdiction under Section 404 of the CWA and also considered subject to RWQCB jurisdiction as wetland WOTS. Specifically, Feature 8 satisfies the jurisdictional wetlands criteria and, therefore, is subject to USACE jurisdiction as wetlands under Section 404 of the CWA and also supports State wetlands. See Table D for a summary of RWQCB jurisdictional areas within the JDSA.

#### *Non-jurisdictional Features*

The corrugated drainage pipes and culvert inlets and outlets along the JDSA boundaries within the JDSA (including Features 33 through 35), as well as Features 31 and 32 due to their absence of an OHWM, are not expected to be considered jurisdictional under Section 401 of the CWA or the Porter-Cologne Act.

#### **DISCLAIMER**

The findings and conclusions presented in this report, including the locations and extents of features subject to regulatory jurisdiction (or lack thereof), represent the professional opinion of the consultant biologists. These findings and conclusions should be considered preliminary until verified by the appropriate regulatory agencies.



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## APPENDIX A

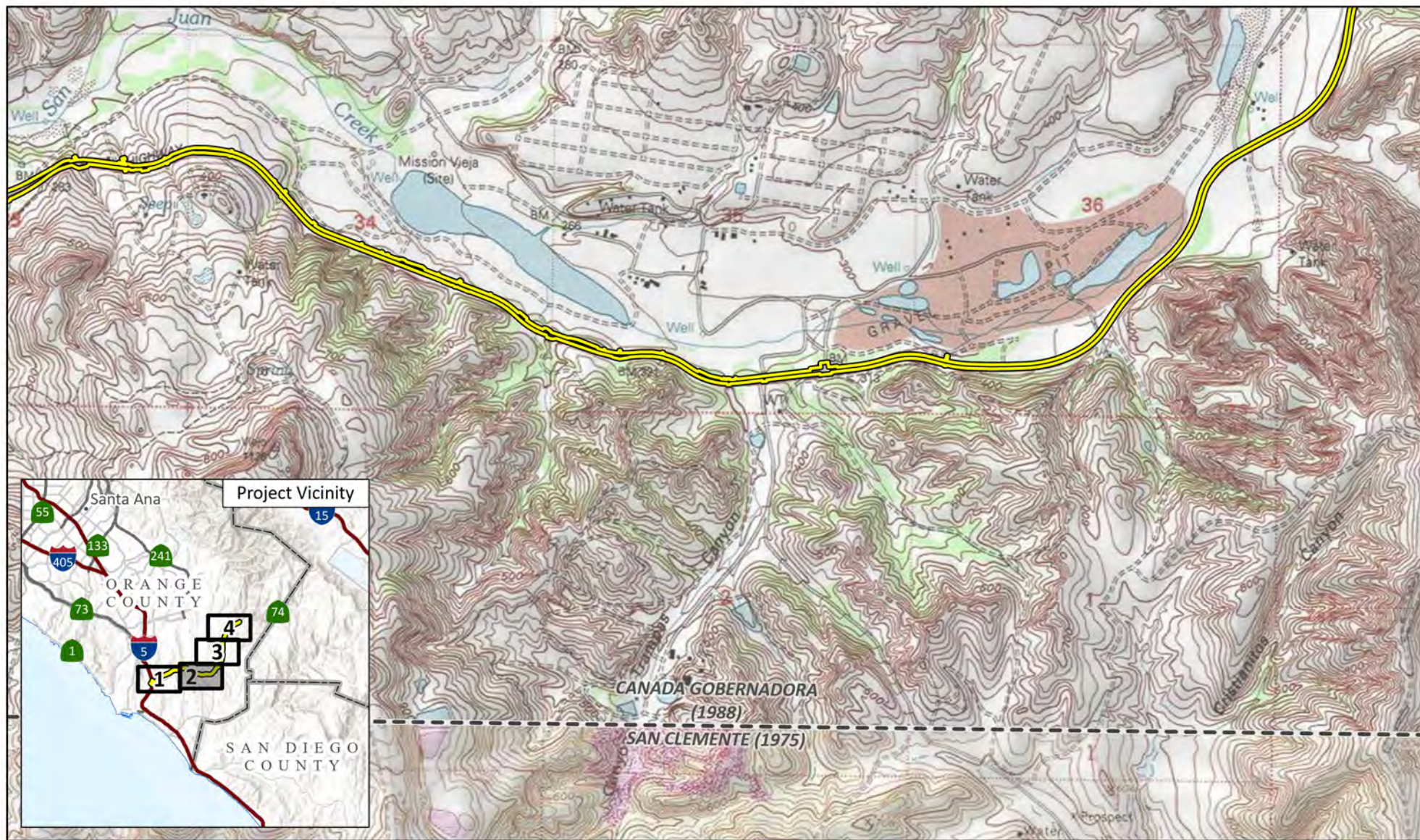
### FIGURES

- Figure 1: Project Location
- Figure 2: Vegetation and Landcover
- Figure 3: National Wetland Inventory
- Figure 4: Soils
- Figure 5: Jurisdictional Areas
- Figure 6: Representative Photographs



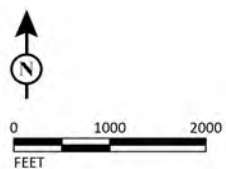






Project Site

FIGURE 1  
Sheet 2 of 4



SOURCE: USGS 7.5' Quad - Canada Gobernadora, CA (1988), San Clemente, CA (1975)

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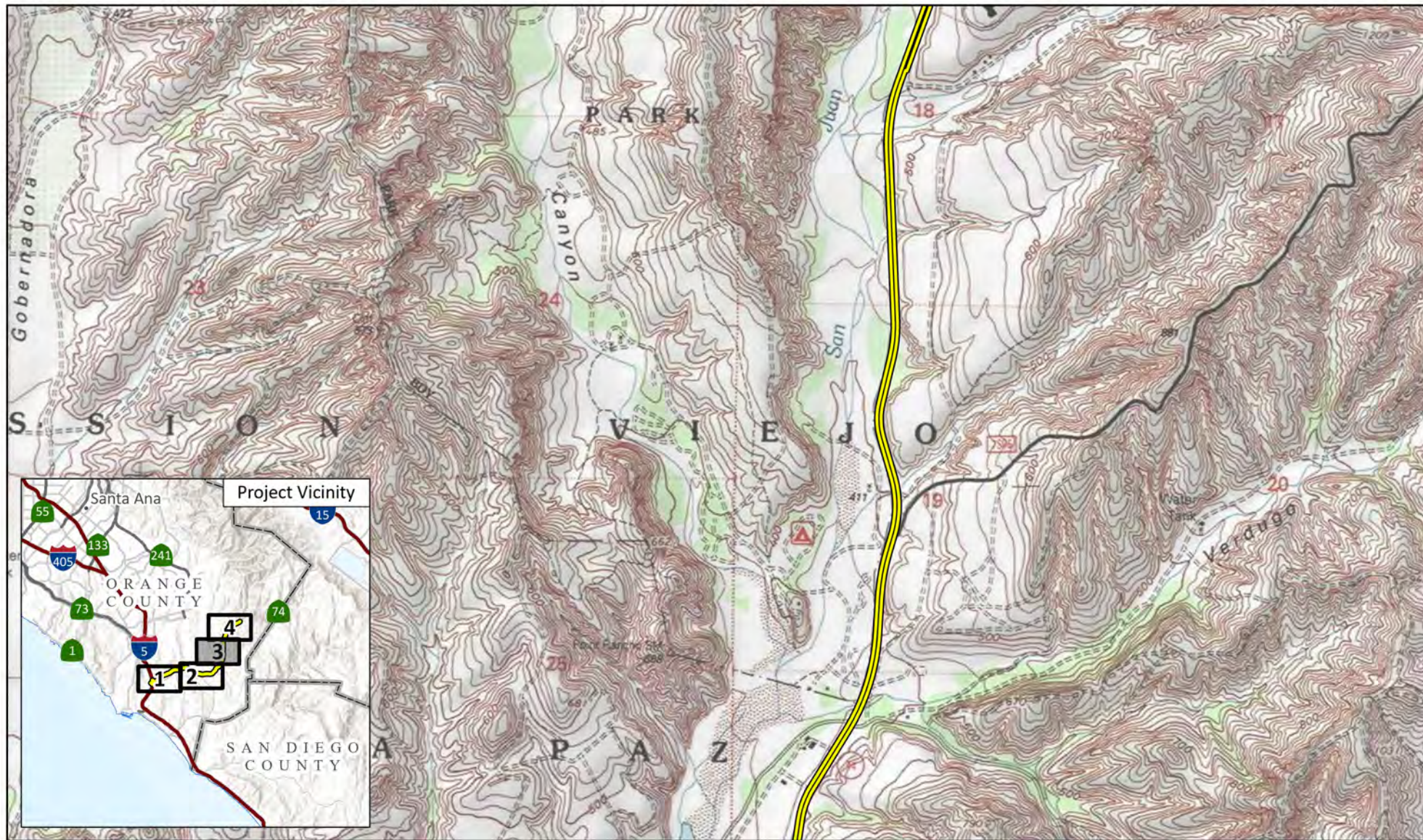
SR-74 Multi-Asset Management

Project Location

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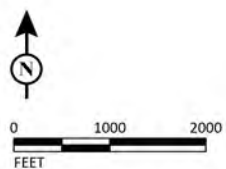
 Project Site

FIGURE 1  
Sheet 3 of 4



SOURCE: USGS 7.5' Quad - Canada Gobernadora, CA (1988)

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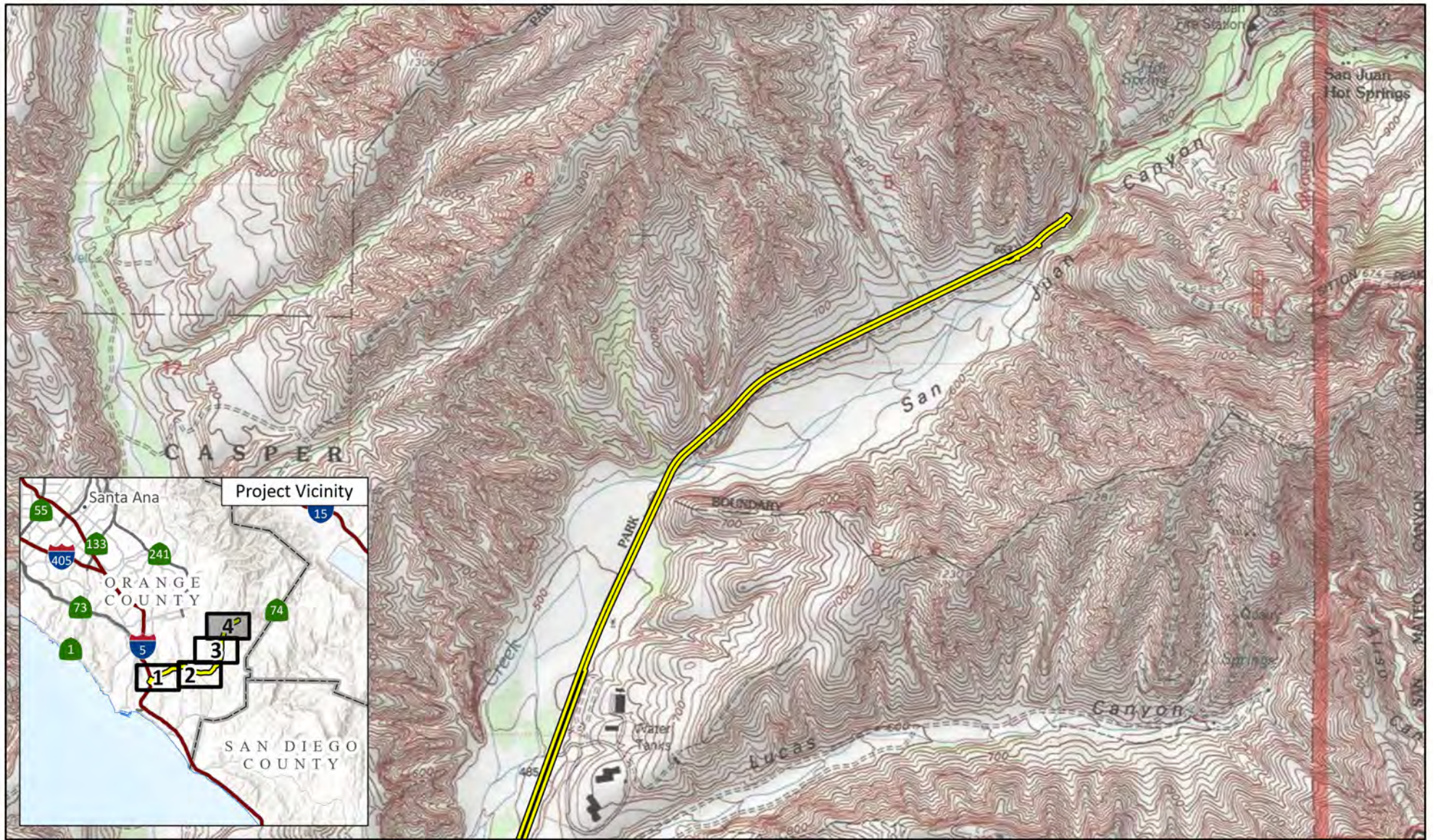
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Project Location

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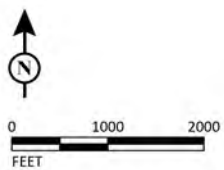
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 Project Site

FIGURE 1  
Sheet 4 of 4



SOURCE: USGS 7.5' Quad - Canada Gobernadora, CA (1988)

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SR-74 Multi-Asset Management

Project Location

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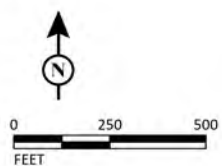
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|---|--|
| <span style="border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> Project Site                   | <b>Vegetation</b>  |
| <span style="border: 2px solid green; display: inline-block; width: 20px; height: 10px;"></span> Critical Habitat - Arroyo Toad | <span style="background-color: grey; display: inline-block; width: 20px; height: 10px;"></span> Developed          |
|   | <span style="background-color: purple; display: inline-block; width: 20px; height: 10px;"></span> Ornamental trees |
|   | <span style="background-color: orange; display: inline-block; width: 20px; height: 10px;"></span> Ruderal          |

FIGURE 2  
Sheet 1 of 13



SOURCE: Google (2024); Nearmap (5/7/2025); USFWS (2020)

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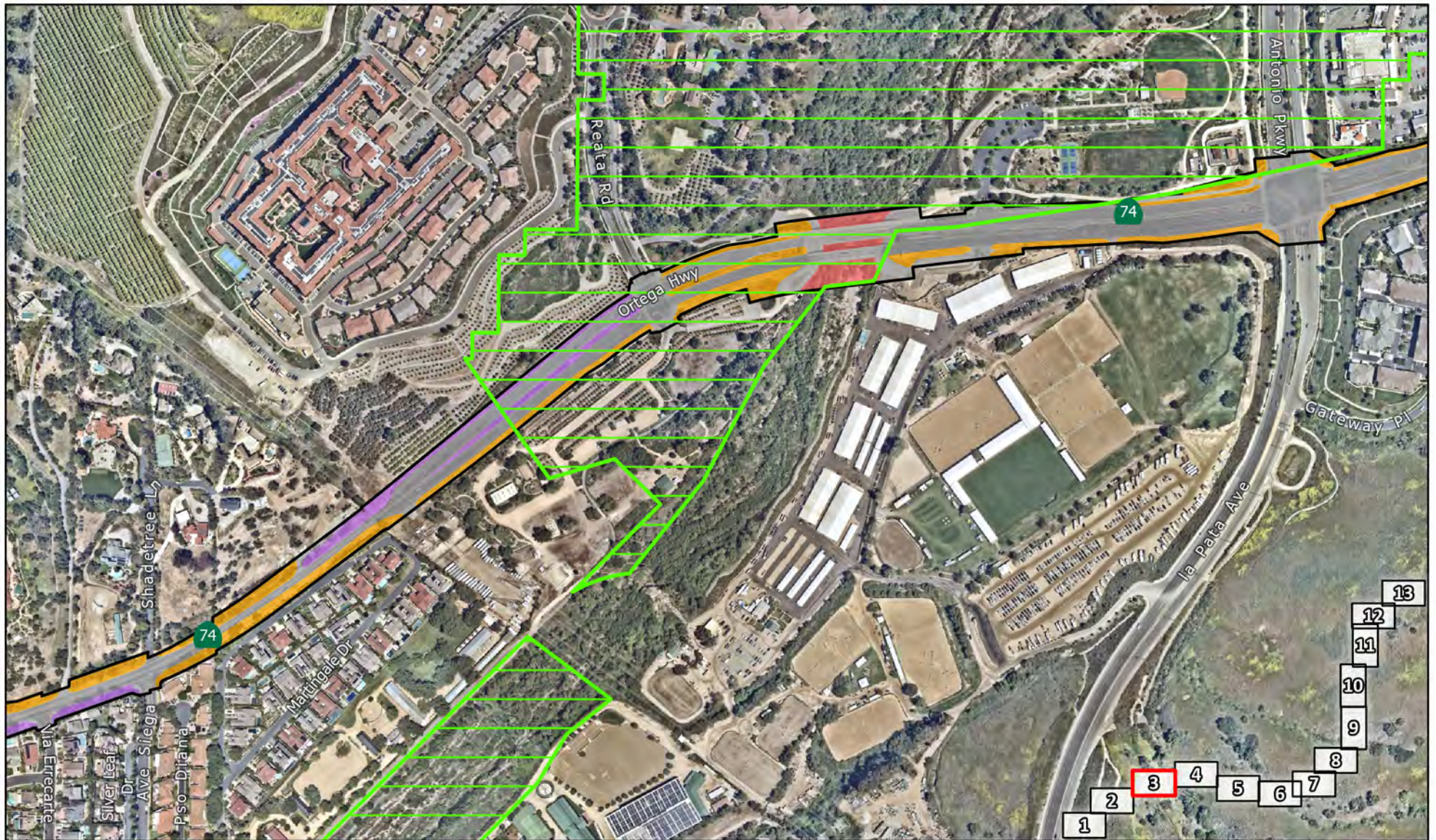
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Vegetation and Land Cover

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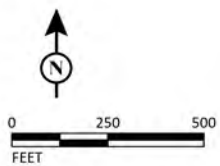






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|--------------------------------|-------------------------------------|
| Project Site                   | Developed                           |
| Critical Habitat - Arroyo Toad | Ornamental trees                    |
|                                | Ruderal                             |
|                                | Southern cottonwood willow riparian |

FIGURE 2  
Sheet 3 of 13



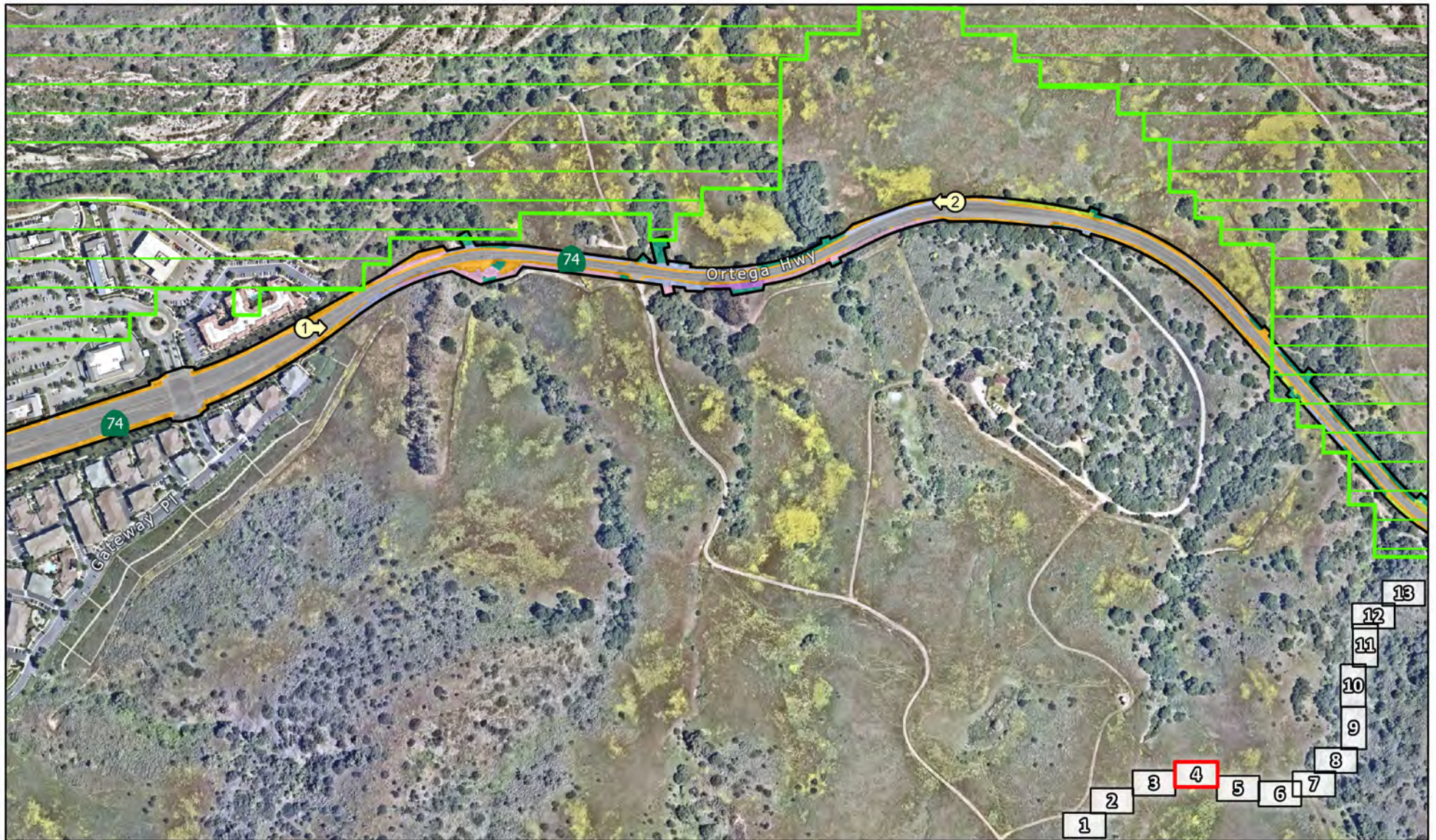
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SR-74 Multi-Asset Management  
Vegetation and Land Cover

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- Project Site
- Critical Habitat - Arroyo Toad
- ↻ Photograph Locations

- Vegetation**
- Chaparral
  - Coast live oak woodland
  - Coastal sage scrub
  - Developed
  - Nonnative grassland
  - Ornamental trees

- Ruderal
- Southern cottonwood willow riparian

**FIGURE 2**  
Sheet 4 of 13

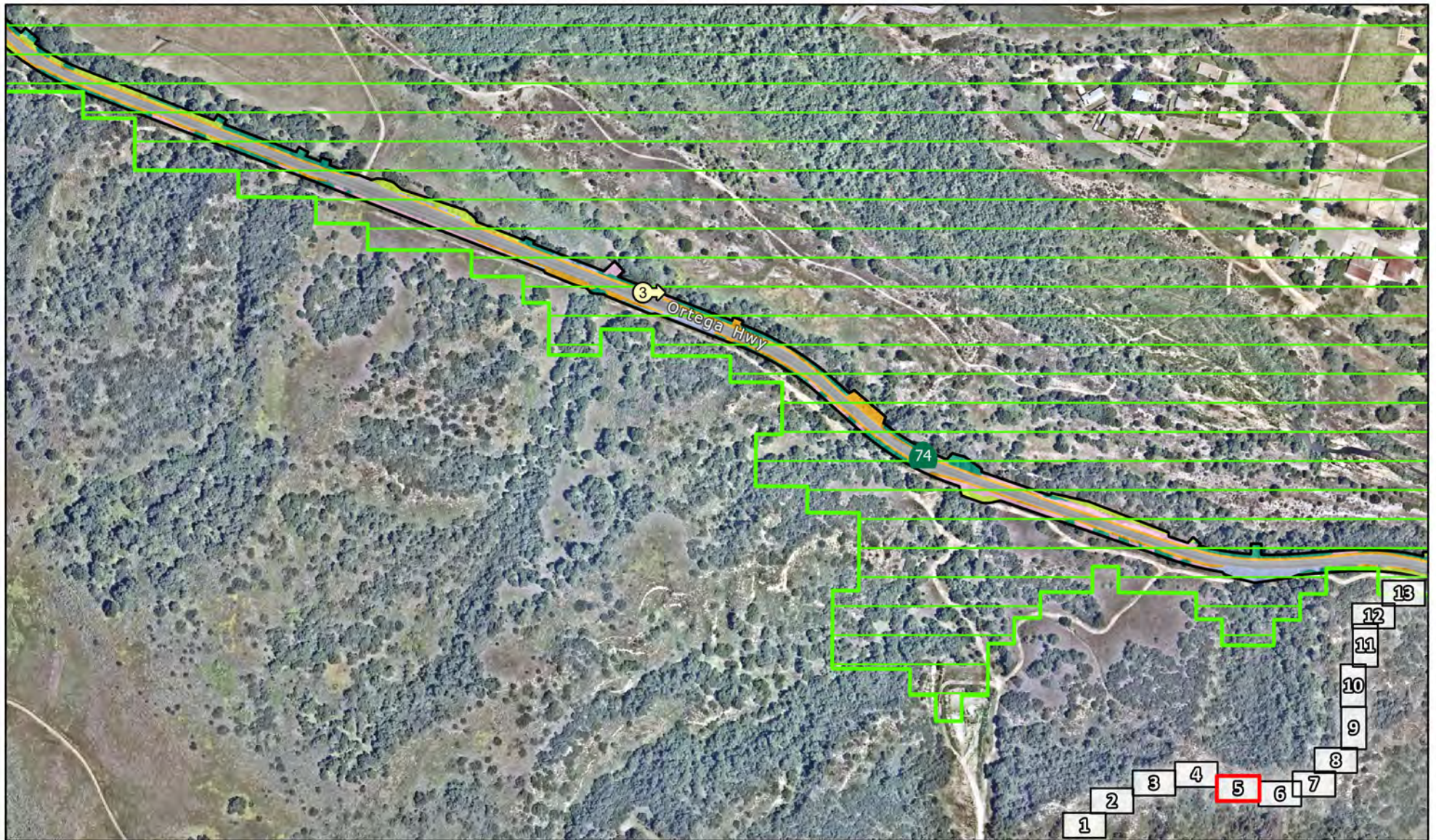
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**Vegetation and Land Cover**

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- Project Site
- Critical Habitat - Arroyo Toad
- ➔ Photograph Locations

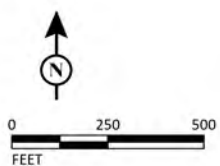
- Vegetation**
- Chaparral
  - Coast live oak woodland
  - Coastal sage scrub
  - Developed
  - Nonnative grassland
  - Ruderal

FIGURE 2

Sheet 5 of 13

*SR-74 Multi-Asset Management*  
Vegetation and Land Cover

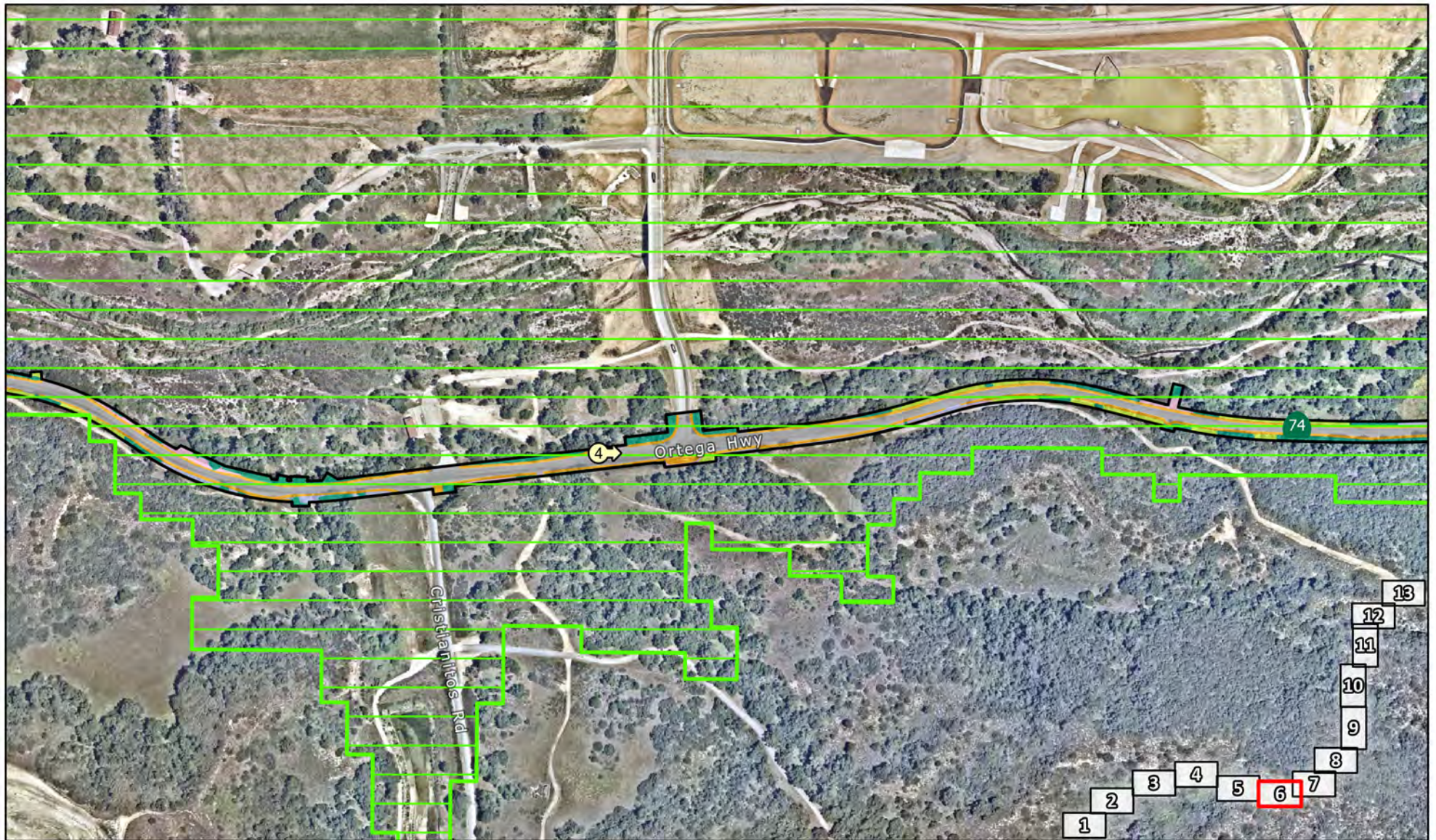
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SOURCE: Google (2024); Nearmap (5/7/2025); USFWS (2020)

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|--------------------------------|-------------------------|
| Project Site                   | Chaparral               |
| Critical Habitat - Arroyo Toad | Coast live oak woodland |
| Photograph Locations           | Coastal sage scrub      |
|                                | Developed               |
|                                | Nonnative grassland     |
|                                | Ruderal                 |

FIGURE 2

Sheet 6 of 13

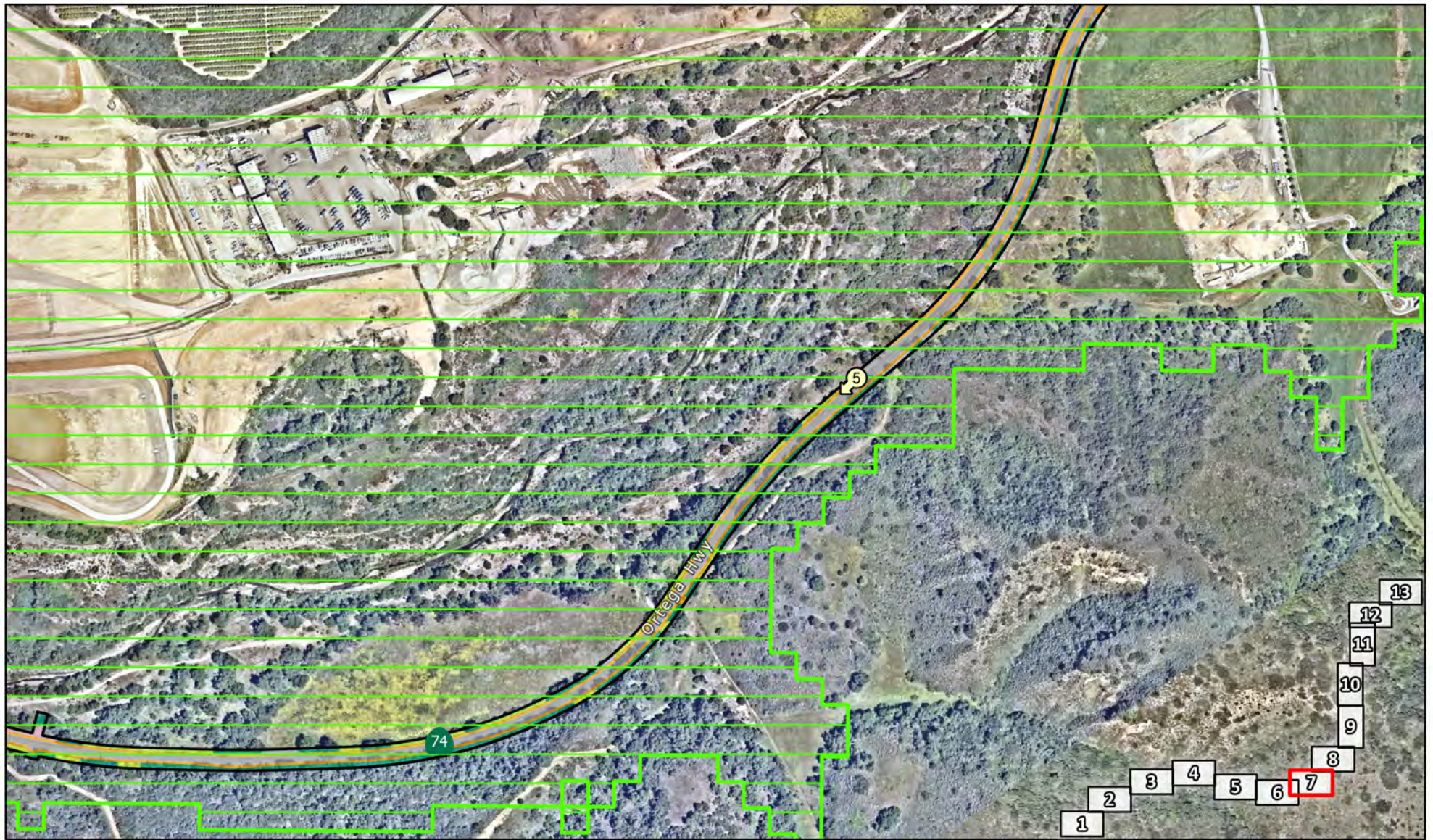
*SR-74 Multi-Asset Management*  
Vegetation and Land Cover

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SOURCE: Google (2024); Nearmap (5/7/2025); USFWS (2020)

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|--------------------------------|-------------------------|
| Project Site                   | Chaparral               |
| Critical Habitat - Arroyo Toad | Coast live oak woodland |
| Photograph Locations           | Coastal sage scrub      |
|                                | Developed               |
|                                | Nonnative grassland     |
|                                | Ruderal                 |

FIGURE 2

Sheet 7 of 13

*SR-74 Multi-Asset Management*  
Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA OR990 1219000072

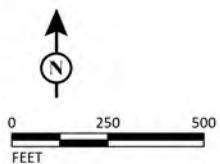
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|--------------------------------|-------------------------|
| Project Site                   | Vegetation              |
| Critical Habitat - Arroyo Toad | Chaparral               |
| Photograph Locations           | Coast live oak woodland |
|                                | Developed               |
|                                | Nonnative grassland     |
|                                | Ruderal                 |



SOURCE: Google (2024); Nearmap (5/7/2025); USFWS (2020)

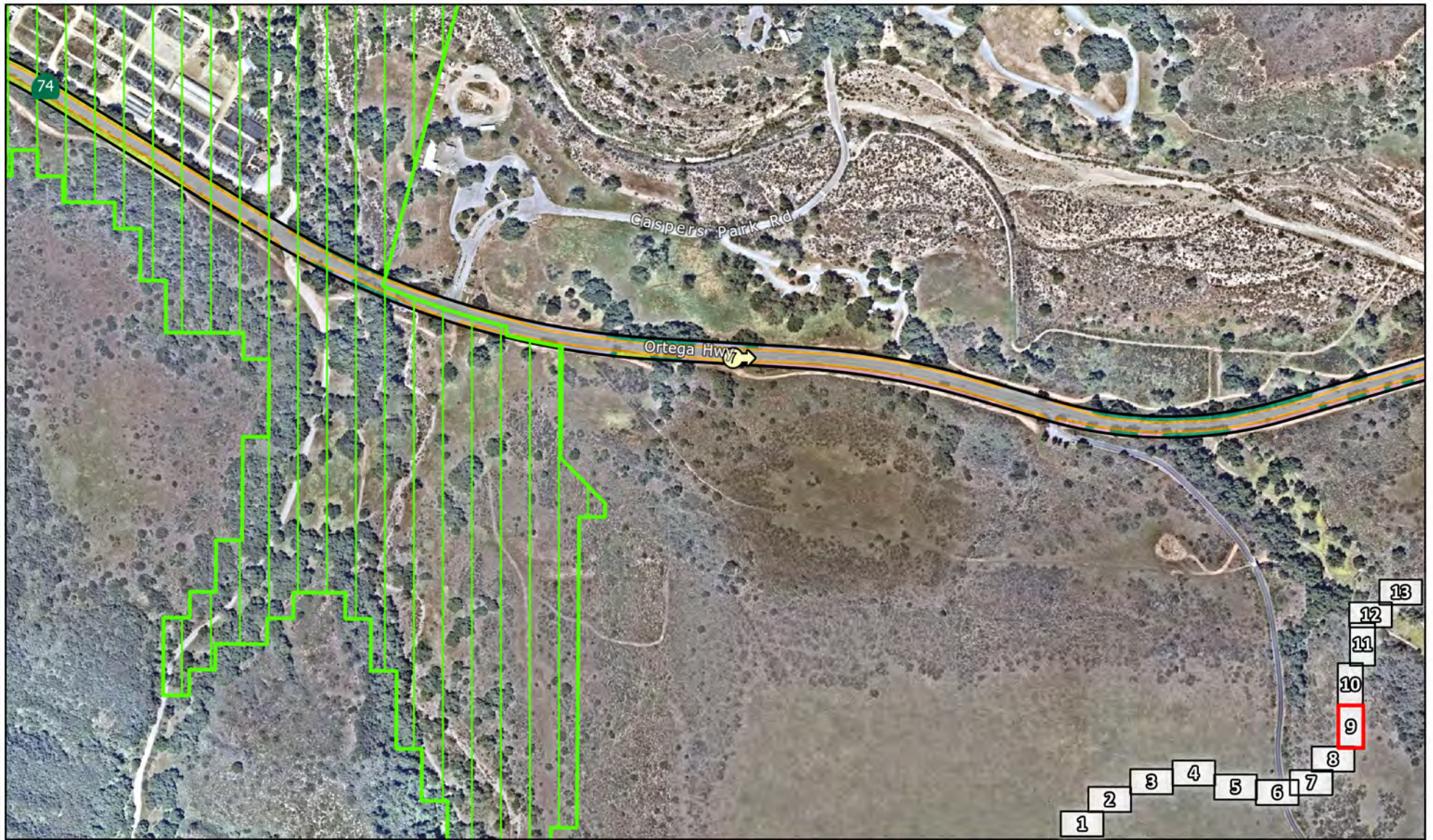
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FIGURE 2  
Sheet 8 of 13

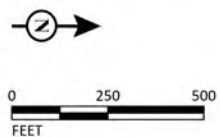
*SR-74 Multi-Asset Management*  
**Vegetation and Land Cover**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





- |                                |                         |
|--------------------------------|-------------------------|
| Project Site                   | Chaparral               |
| Critical Habitat - Arroyo Toad | Coast live oak woodland |
| Photograph Locations           | Coastal sage scrub      |
|                                | Developed               |
|                                | Nonnative grassland     |
|                                | Ruderal                 |



SOURCE: Google (2024); Nearmap (5/7/2025); USFWS (2020)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)



FIGURE 2  
Sheet 9 of 13

SR-74 Multi-Asset Management  
Vegetation and Land Cover

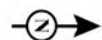
12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





 Project Site  
 Photograph Locations

**Vegetation**  
 Chaparral  
 Coast live oak woodland  
 Coastal sage scrub  
 Developed  
 Nonnative grassland  
 Ruderal



0 250 500  
 FEET

SOURCE: Google (2024); Nearmap (5/7/2025); USFWS (2020)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 2  
 Sheet 10 of 13

SR-74 Multi-Asset Management  
 Vegetation and Land Cover

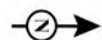
12-ORA-SR7473 – PM 0.0-11.5  
 EA 0R990 1219000072





Project Site  
 Critical Habitat - Arroyo Toad

**Vegetation**  
 Chaparral  
 Coast live oak woodland  
 Coastal sage scrub  
 Developed  
 Nonnative grassland  
 Ruderal



0 250 500  
 FEET

SOURCE: Google (2024); Nearmap (5/7/2025); USFWS (2020)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

FIGURE 2  
 Sheet 11 of 13

SR-74 Multi-Asset Management  
 Vegetation and Land Cover

12-ORA-SR7473 - PM 0.0-11.5  
 EA 0R990 1219000072





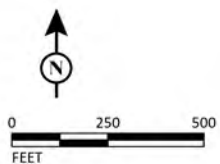
Project Site

Vegetation

Southern cottonwood willow riparian

- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal

FIGURE 2  
Sheet 12 of 13



SOURCE: Google (2024); Nearmap (5/7/2025); USFWS (2020)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/12/2025)

SR-74 Multi-Asset Management  
Vegetation and Land Cover

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





Project Site

Vegetation

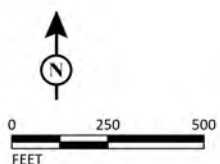
- Chaparral
- Coast live oak woodland
- Coastal sage scrub
- Developed
- Nonnative grassland
- Ruderal

FIGURE 2

Sheet 13 of 13

SR-74 Multi-Asset Management  
Vegetation and Land Cover

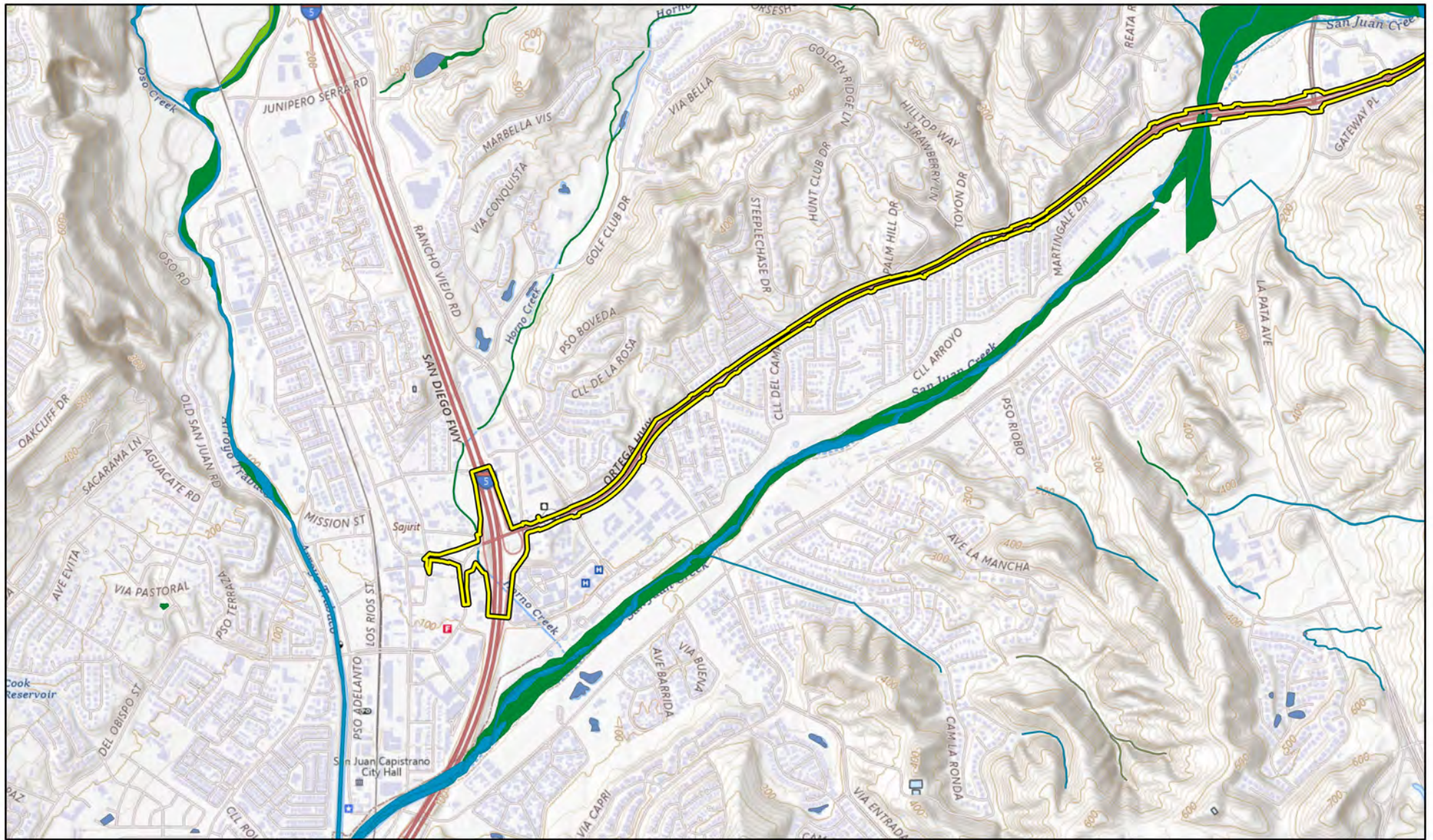
12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



SOURCE: Google (2024); Nearmap (5/7/2025); USFWS (2020)

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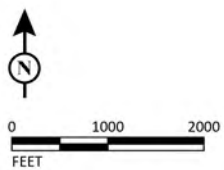




Project Site

National Wetlands Inventory

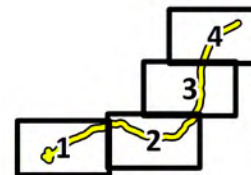
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Riverine



SOURCE: USGS The National Map (2025); USFWS (2025)

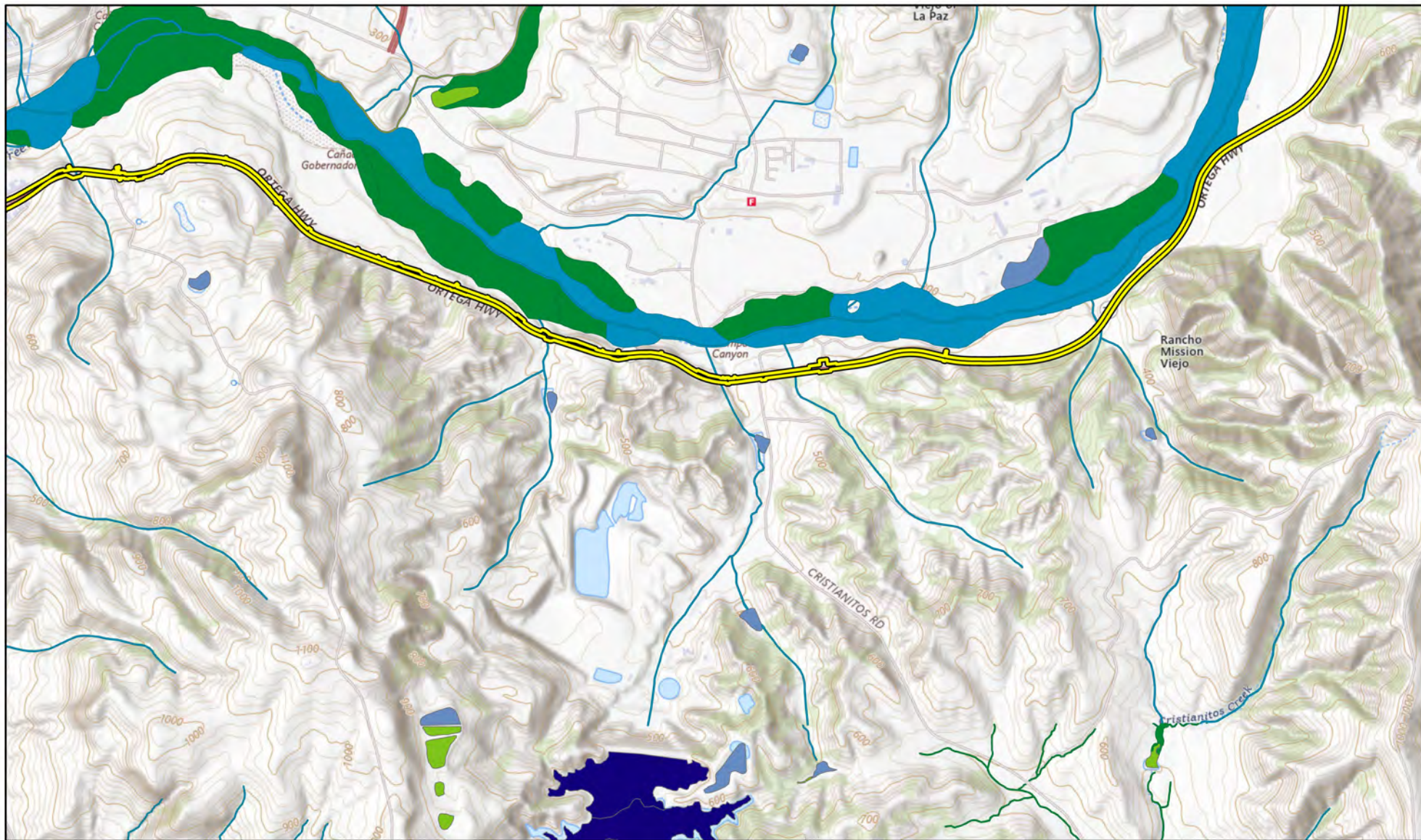
I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (9/25/2025)

FIGURE 3  
Sheet 1 of 4



SR-74 Multi-Asset Management  
National Wetland Inventory  
12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





Project Site

National Wetlands Inventory

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

Lake

Riverine



0 1000 2000  
FEET

SOURCE: USGS The National Map (2025); USFWS (2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (9/25/2025)

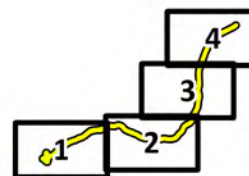


FIGURE 3  
Sheet 2 of 4

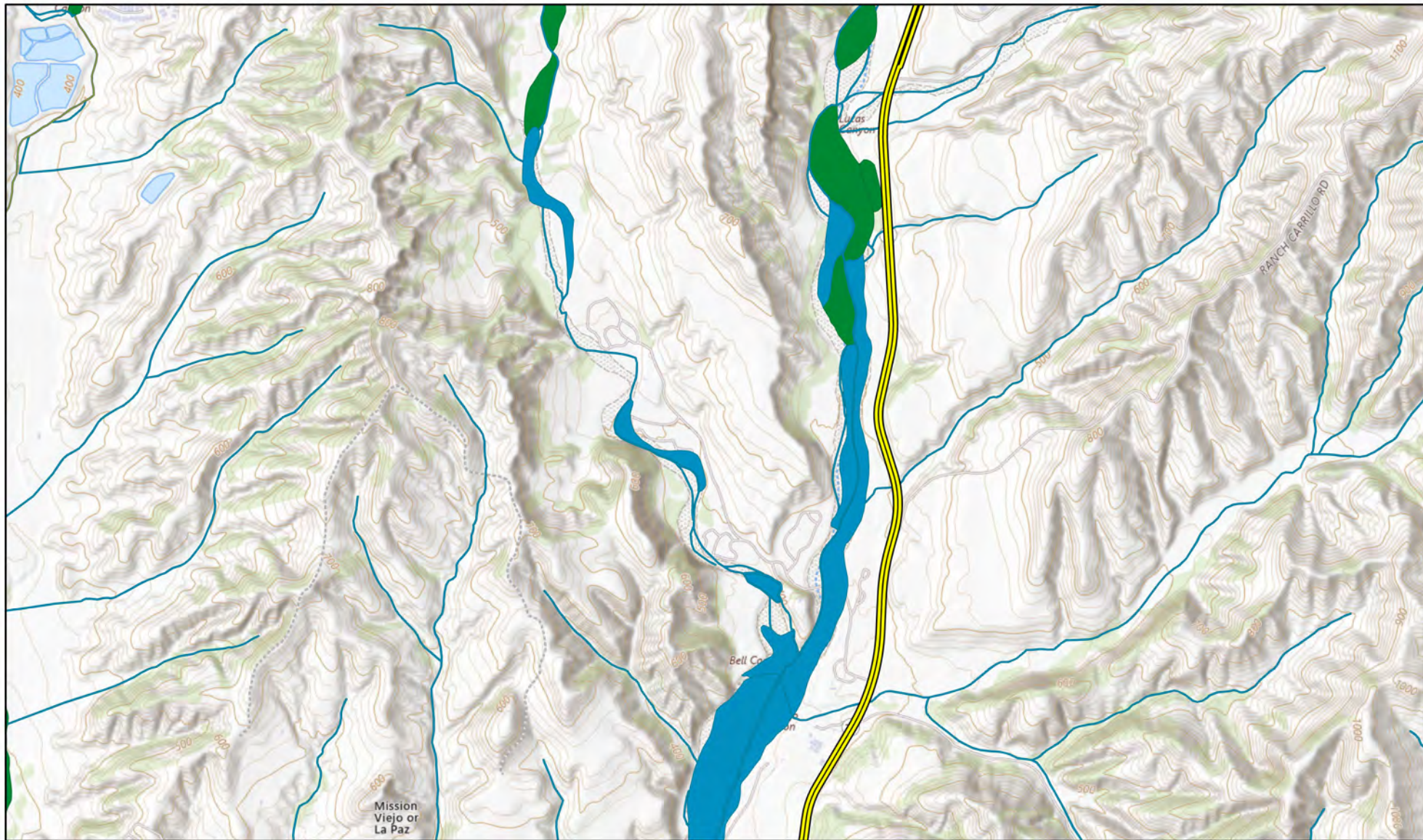
SR-74 Multi-Asset Management

National Wetland Inventory

12-ORA-SR7473 – PM 0.0-11.5

EA 0R990 1219000072





-  Project Site
- National Wetlands Inventory
-  Freshwater Emergent Wetland
  -  Freshwater Forested/Shrub Wetland
  -  Riverine

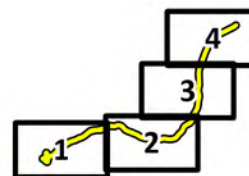


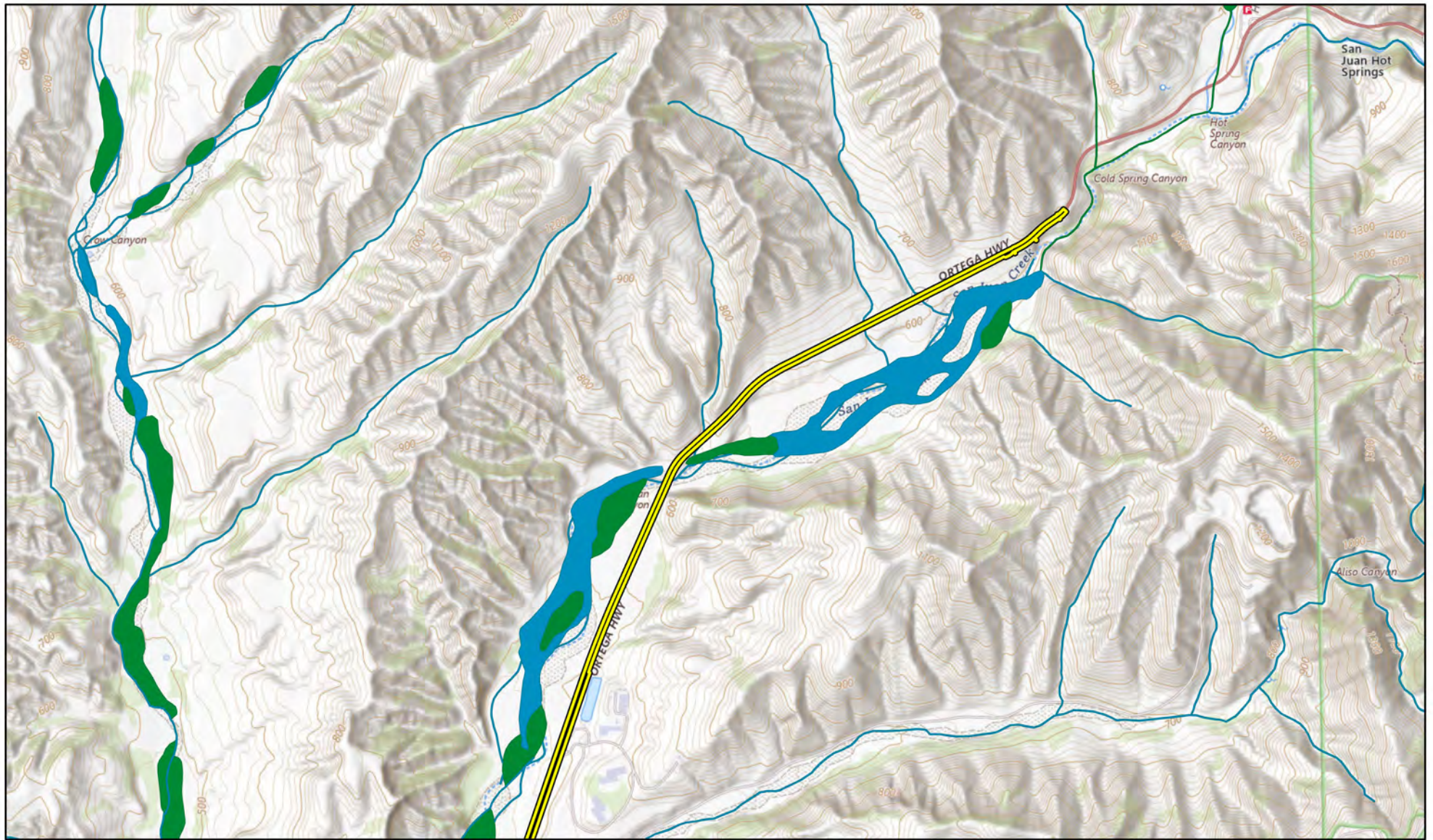
FIGURE 3  
Sheet 3 of 4


SR-74 Multi-Asset Management  
National Wetland Inventory  
12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072

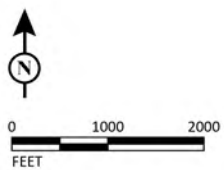
SOURCE: USGS The National Map (2025); USFWS (2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (9/25/2025)





-  Project Site
- National Wetlands Inventory
-  Freshwater Forested/Shrub Wetland
-  Riverine



SOURCE: USGS The National Map (2025); USFWS (2025)

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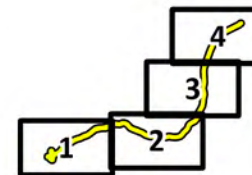


FIGURE 3  
Sheet 4 of 4

SR-74 Multi-Asset Management  
National Wetland Inventory  
12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





Project Site

Soils

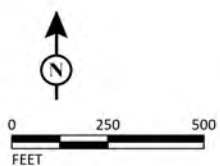
- 178 - Myford sandy loam, thick surface, 0 to 2 percent slopes
- 191 - Riverwash
- 207 - Sorrento loam, 2 to 9 percent slopes, warm MAAT, MLRA 19

- 208 - Sorrento clay loam, 0 to 2 percent slopes, warm MAAT, MLRA 19
- 209 - Sorrento clay loam, 2 to 9 percent slopes, warm MAAT, MLRA 19
- 221 - Yorba gravelly sandy loam, 2 to 9 percent slopes
- 223 - Yorba gravelly sandy loam, 15 to 30 percent slopes
- 226 - Yorba cobbly sandy loam, 30 to 50 percent slopes

FIGURE 4  
Sheet 1 of 13

SR-74 Multi-Asset Management  
Soils

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



SOURCE: Maxar (2025); USDA (2025)

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Project Site

Soils

- 127 - Bosanko clay, 15 to 30 percent slopes
- 130 - Bosanko-Balcom complex, 30 to 50 percent slopes
- 131 - Botella loam, 2 to 9 percent slopes, warm MAAT, lower MAP, MLRA 19
- 134 - Calleguas clay loam, 50 to 75 percent slopes, eroded

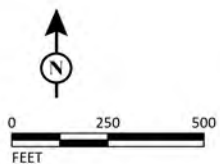
- 142 - Cieneba sandy loam, 30 to 75 percent slopes, eroded
- 146 - Corralitos loamy sand
- 169 - Modjeska gravelly loam, 2 to 9 percent slopes
- 191 - Riverwash
- 209 - Sorrento clay loam, 2 to 9 percent slopes, warm MAAT, MLRA 19

FIGURE 4  
Sheet 3 of 13

SR-74 Multi-Asset Management

Soils

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072




SOURCE: Maxar (2025); USDA (2025)


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 Project Site


Soils

 128 - Bosanko clay, 30 to 50 percent slopes

 142 - Cieneba sandy loam, 30 to 75 percent slopes, eroded

 169 - Modjeska gravelly loam, 2 to 9 percent slopes

 175 - Myford sandy loam, 9 to 15 percent slopes

 201 - Soper gravelly loam, 15 to 30 percent slopes, MLRA 20


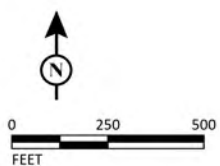
 204 - Soper-Rock outcrop complex, 30 to 75 percent slopes

FIGURE 4  
Sheet 4 of 13

SR-74 Multi-Asset Management

Soils

12-ORA-SR7473 - PM 0.0-11.5  
EA 0R990 1219000072



SOURCE: Maxar (2025); USDA (2025)


I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (9/25/2025)








 Project Site


Soils


 131 - Botella loam, 2 to 9 percent slopes, warm MAAT, lower MAP, MLRA 19

 135 - Capistrano sandy loam, 2 to 9 percent slopes

 136 - Capistrano sandy loam, 9 to 15 percent slopes

 142 - Cieneba sandy loam, 30 to 75 percent slopes, eroded

 175 - Myford sandy loam, 9 to 15 percent slopes

 200 - Soper loam, 30 to 50 percent slopes


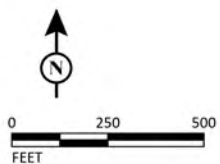
 201 - Soper gravelly loam, 15 to 30 percent slopes, MLRA 20

FIGURE 4  
Sheet 5 of 13

SR-74 Multi-Asset Management

Soils

12-ORA-SR7473 - PM 0.0-11.5  
EA 0R990 1219000072



SOURCE: Maxar (2025); USDA (2025)


I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (9/25/2025)








 Project Site


Soils

 131 - Botella loam, 2 to 9 percent slopes, warm MAAT, lower MAP, MLRA 19

 142 - Cienega sandy loam, 30 to 75 percent slopes, eroded

 146 - Corralitos loamy sand

 191 - Riverwash

 193 - San Andreas sandy loam, 15 to 30 percent slopes, warm MAAT, MLRA 20


 197 - Soboba gravelly loamy sand, 0 to 5 percent slopes

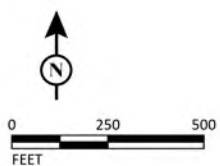
FIGURE 4  
Sheet 6 of 13

SR-74 Multi-Asset Management

Soils

12-ORA-SR7473 - PM 0.0-11.5

EA 0R990 1219000072



SOURCE: Maxar (2025); USDA (2025)


I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (9/25/2025)








 Project Site

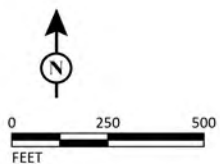
Soils

 135 - Capistrano sandy loam, 2 to 9 percent slopes

 142 - Cieneba sandy loam, 30 to 75 percent slopes, eroded

 146 - Corralitos loamy sand

 191 - Riverwash



SOURCE: Maxar (2025); USDA (2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (9/25/2025)

FIGURE 4  
Sheet 7 of 13

SR-74 Multi-Asset Management


Soils

12-ORA-SR7473 - PM 0.0-11.5





EA 0R990 1219000072

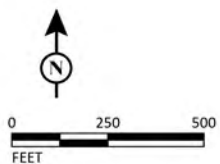




 Project Site

Soils

-  135 - Capistrano sandy loam, 2 to 9 percent slopes
-  136 - Capistrano sandy loam, 9 to 15 percent slopes
-  146 - Corralitos loamy sand
-  191 - Riverwash



SOURCE: Maxar (2025); USDA (2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (9/25/2025)

FIGURE 4  
Sheet 8 of 13

SR-74 Multi-Asset Management


Soils

12-ORA-SR7473 - PM 0.0-11.5






EA 0R990 1219000072





 Project Site

Soils

-  135 - Capistrano sandy loam, 2 to 9 percent slopes
-  136 - Capistrano sandy loam, 9 to 15 percent slopes
-  142 - Cieneba sandy loam, 30 to 75 percent slopes, eroded
-  146 - Corralitos loamy sand
-  169 - Modjeska gravelly loam, 2 to 9 percent slopes




-  173 - Myford sandy loam, 2 to 9 percent slopes
-  197 - Soboba gravelly loamy sand, 0 to 5 percent slopes
-  198 - Soboba cobbly loamy sand, 0 to 15 percent slopes

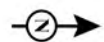
FIGURE 4  
Sheet 9 of 13

SR-74 Multi-Asset Management

Soils

12-ORA-SR7473 - PM 0.0-11.5

EA 0R990 1219000072

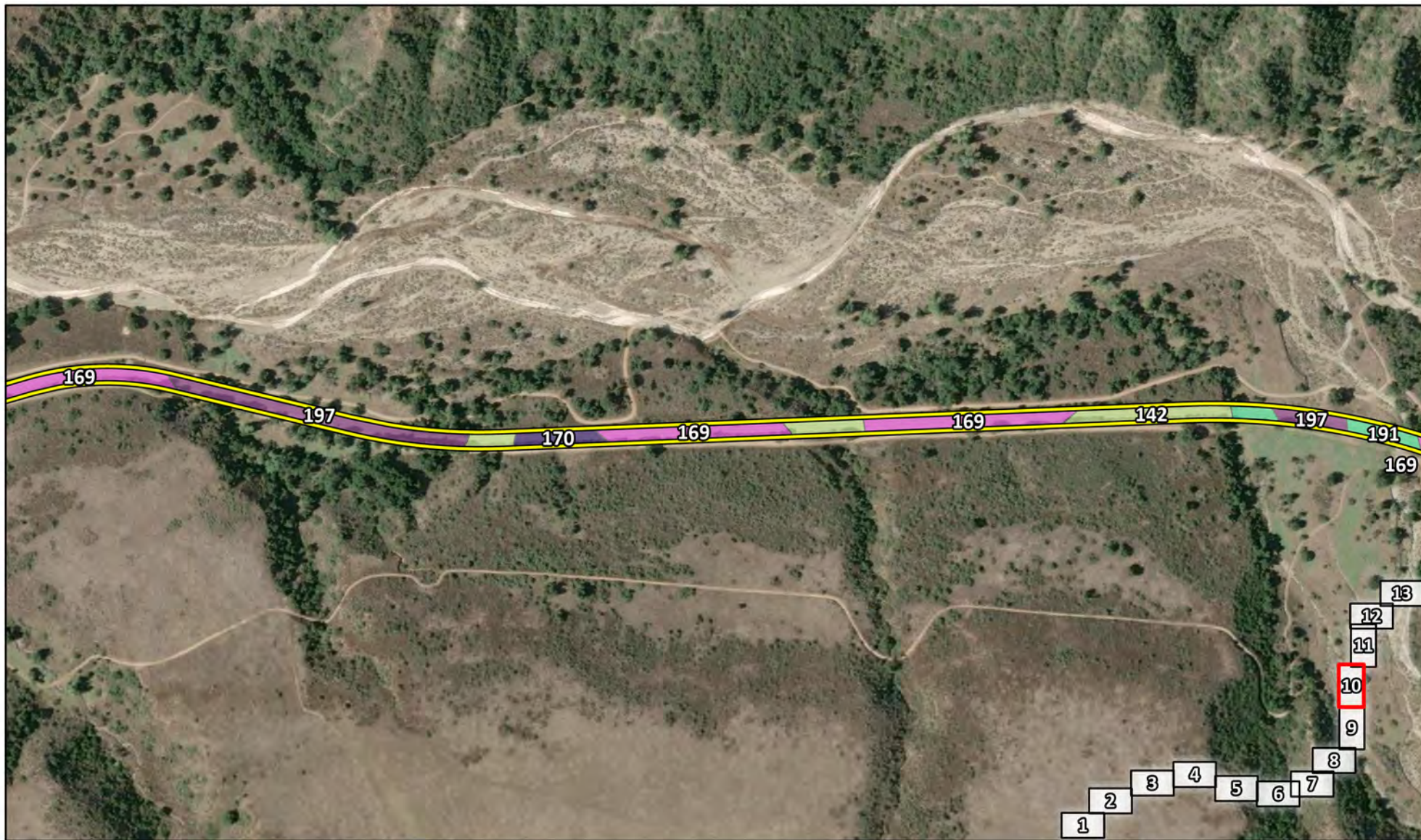


0 250 500  
FEET

SOURCE: Maxar (2025); USDA (2025)






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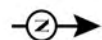




 Project Site

Soils

-  142 - Cieneba sandy loam, 30 to 75 percent slopes, eroded
-  169 - Modjeska gravelly loam, 2 to 9 percent slopes
-  170 - Modjeska gravelly loam, 9 to 15 percent slopes
-  191 - Riverwash
-  197 - Soboba gravelly loamy sand, 0 to 5 percent slopes



0 250 500  
FEET

SOURCE: Maxar (2025); USDA (2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (9/25/2025)

FIGURE 4  
Sheet 10 of 13

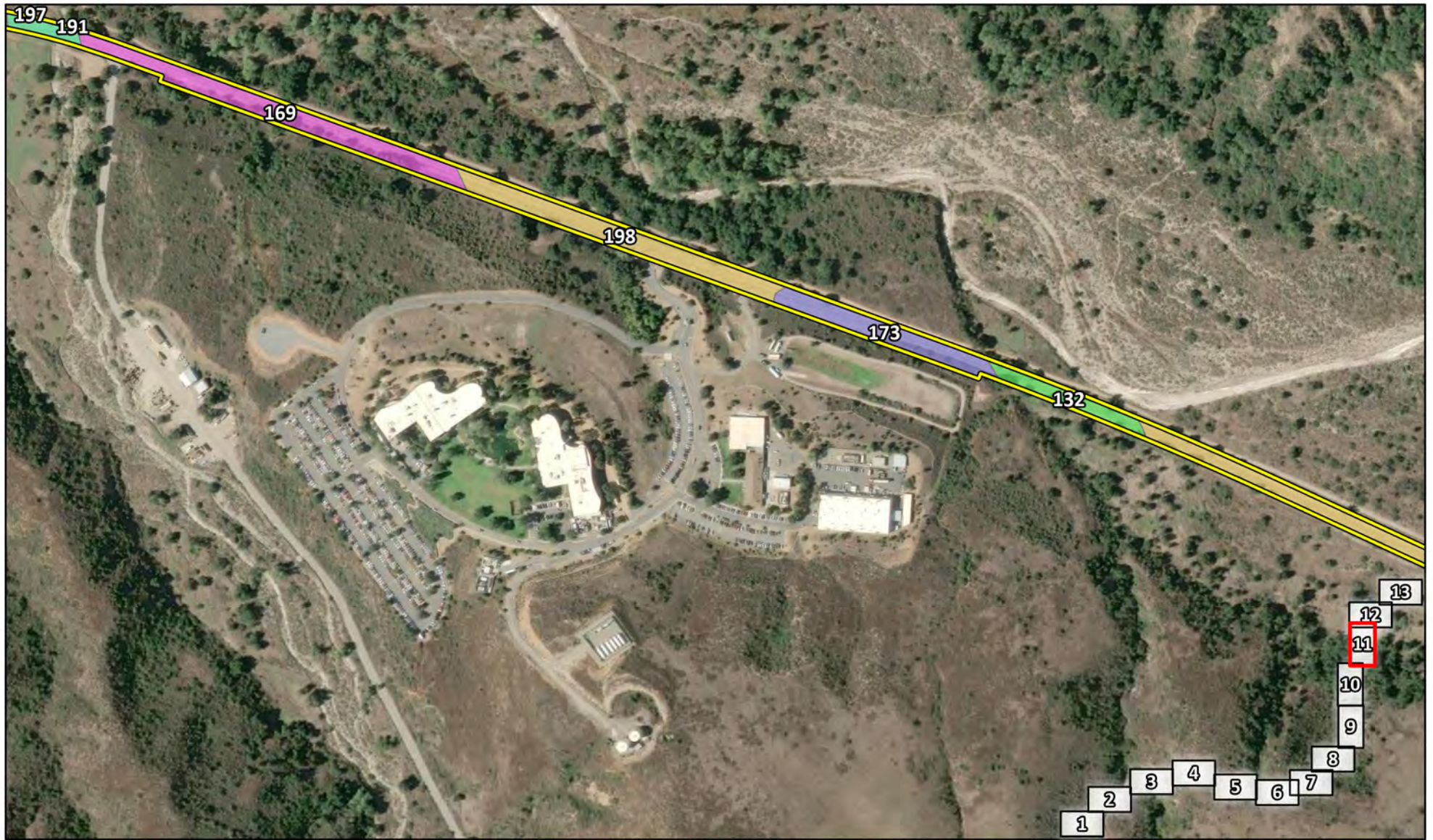
SR-74 Multi-Asset Management


Soils

12-ORA-SR7473 - PM 0.0-11.5


EA 0R990 1219000072








 Project Site


Soils

 132 - Botella clay loam, 2 to 9 percent slopes, warm  
MAAT, MLRA 19

 169 - Modjeska gravelly loam, 2 to 9 percent slopes

 173 - Myford sandy loam, 2 to 9 percent slopes

 191 - Riverwash

 197 - Soboba gravelly loamy sand, 0 to 5 percent slopes


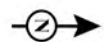
 198 - Soboba cobbly loamy sand, 0 to 15 percent slopes

FIGURE 4  
Sheet 11 of 13



0 250 500  
FEET

SOURCE: Maxar (2025); USDA (2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (9/25/2025)

SR-74 Multi-Asset Management







Soils

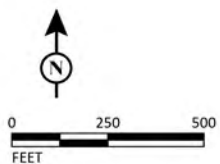
12-ORA-SR7473 - PM 0.0-11.5

EA 0R990 1219000072





-  Project Site
- Soils
-  101 - Alo clay, 15 to 30 percent slopes, dry
  -  142 - Cieneba sandy loam, 30 to 75 percent slopes, eroded
  -  170 - Modjeska gravelly loam, 9 to 15 percent slopes
  -  191 - Riverwash
  -  198 - Soboba cobbly loamy sand, 0 to 15 percent slopes



SOURCE: Maxar (2025); USDA (2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (9/25/2025)

FIGURE 4  
Sheet 12 of 13

SR-74 Multi-Asset Management


Soils

12-ORA-SR7473 – PM 0.0-11.5


EA 0R990 1219000072








 Project Site


Soils

 142 - Cieneba sandy loam, 30 to 75 percent slopes, eroded

 152 - Exchequer-Rock outcrop complex, 30 to 75 percent slopes

 169 - Modjeska gravelly loam, 2 to 9 percent slopes

 170 - Modjeska gravelly loam, 9 to 15 percent slopes

 197 - Soboba gravelly loamy sand, 0 to 5 percent slopes


 198 - Soboba cobbly loamy sand, 0 to 15 percent slopes

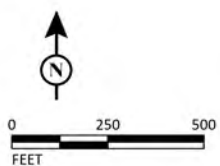
FIGURE 4  
Sheet 13 of 13

SR-74 Multi-Asset Management

Soils

12-ORA-SR7473 – PM 0.0-11.5

EA 0R990 1219000072



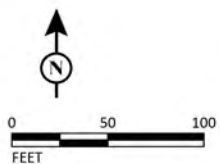
SOURCE: Maxar (2025); USDA (2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (9/25/2025)





- Project Site
- Jurisdictional Features**
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)

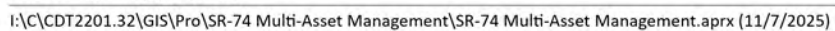
FIGURE 5  
Sheet 1 of 24



SR-74 Multi-Asset Management  
Jurisdictional Areas

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072



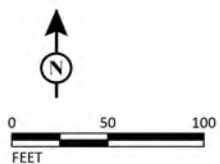


12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





- Project Site  
 Jurisdictional Features  
 CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

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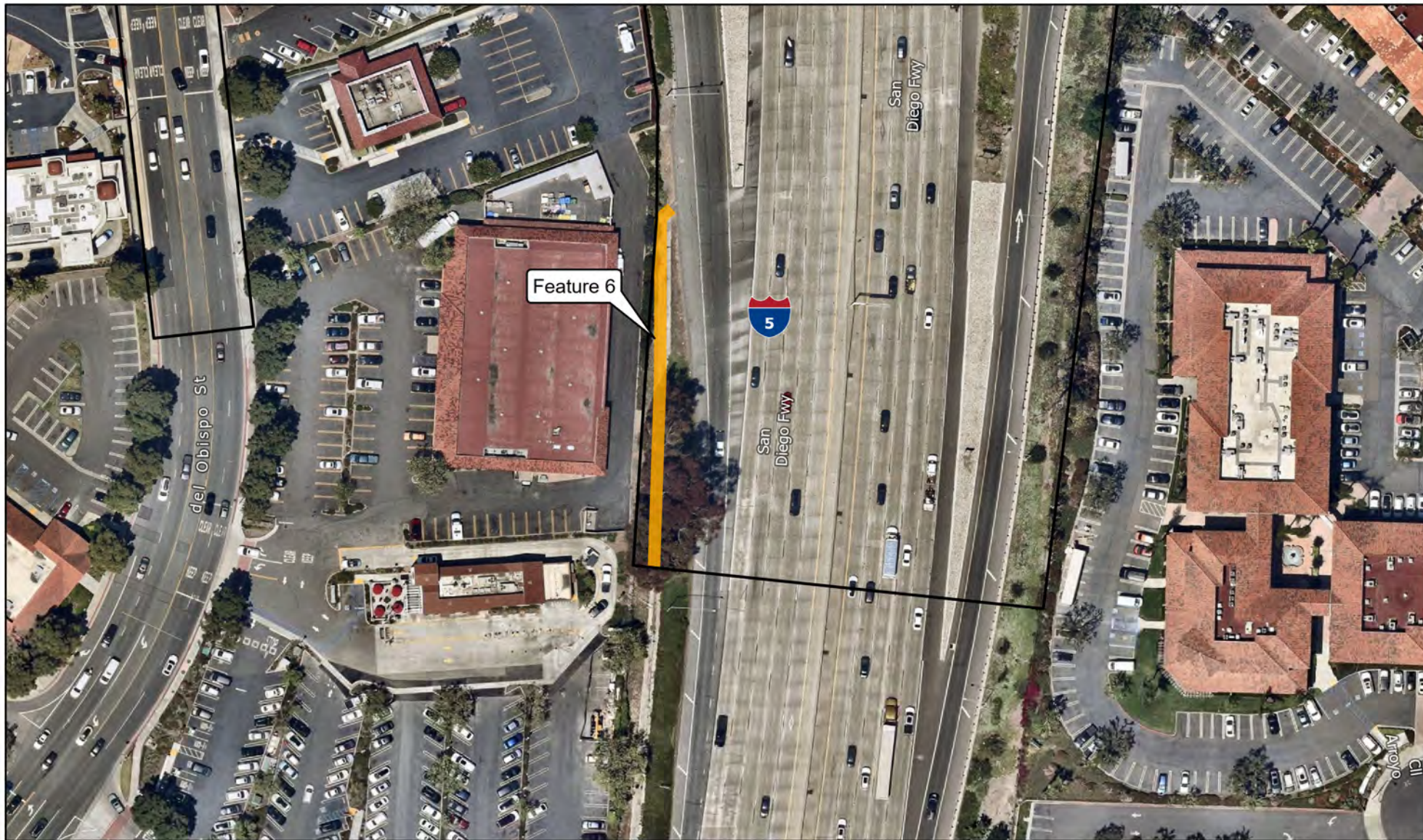
FIGURE 5  
Sheet 3 of 24



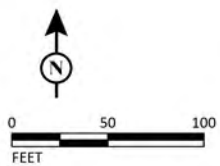
SR-74 Multi-Asset Management  
Jurisdictional Areas

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





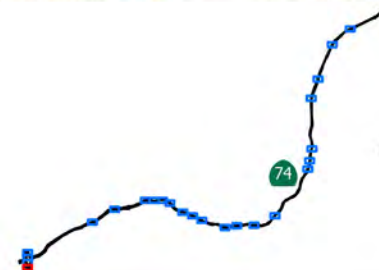
- Project Site  
 Jurisdictional Features  
 CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

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FIGURE 5  
Sheet 4 of 24



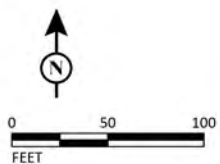
SR-74 Multi-Asset Management  
Jurisdictional Areas

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





- Project Site
- Culvert
- Jurisdictional Features
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)

FIGURE 5  
Sheet 5 of 24



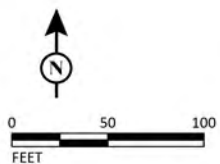
SR-74 Multi-Asset Management  
Jurisdictional Areas

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





- Project Site  
 Low Flow Channel  
**Jurisdictional Features**  
 CDFW Riparian/USACE Wetland Waters/RWQCB Wetland Waters  
 CDFW Streambed/USACE Nonwetland Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)



FIGURE 5  
Sheet 6 of 24

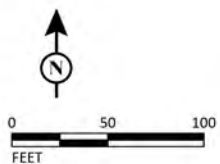
*SR-74 Multi-Asset Management*  
Jurisdictional Areas

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
- CDFW Riparian
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)



FIGURE 5  
Sheet 7 of 24

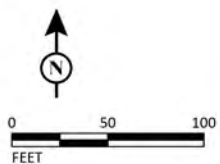
*SR-74 Multi-Asset Management*  
**Jurisdictional Areas**

12-ORA-SR7473 – PM 0.0-11.5  
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- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
  - CDFW Riparian
  - CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)



FIGURE 5  
Sheet 8 of 24

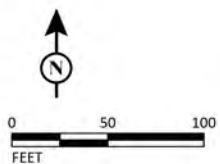
*SR-74 Multi-Asset Management*  
**Jurisdictional Areas**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)







FIGURE 5  
Sheet 9 of 24

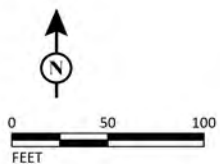
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**Jurisdictional Areas**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





-  Project Site
-  Non-jurisdictional Above Ground Feature
-  Non-jurisdictional Underground Feature
-  Culvert



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)



FIGURE 5  
Sheet 10 of 24

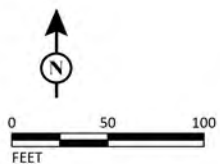
*SR-74 Multi-Asset Management*  
Jurisdictional Areas

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)

FIGURE 5  
Sheet 11 of 24



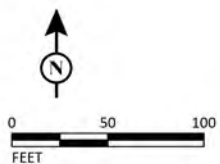
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**Jurisdictional Areas**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





- Project Site
- Non-jurisdictional Above Ground Feature
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
  - CDFW Riparian
  - CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)



FIGURE 5  
Sheet 12 of 24

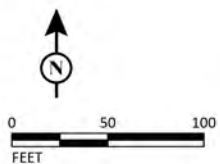
SR-74 Multi-Asset Management  
Jurisdictional Areas

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
- CDFW Riparian
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)



FIGURE 5  
Sheet 13 of 24

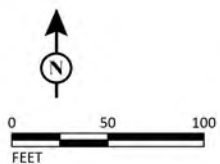
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**Jurisdictional Areas**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
  - CDFW Riparian
  - CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

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FIGURE 5  
Sheet 14 of 24

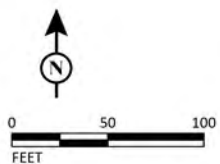
*SR-74 Multi-Asset Management*  
**Jurisdictional Areas**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)



FIGURE 5  
Sheet 15 of 24

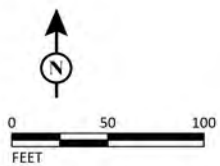
*SR-74 Multi-Asset Management*  
**Jurisdictional Areas**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)



FIGURE 5  
Sheet 16 of 24

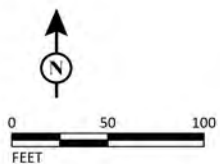
*SR-74 Multi-Asset Management*  
Jurisdictional Areas

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)

FIGURE 5  
Sheet 17 of 24



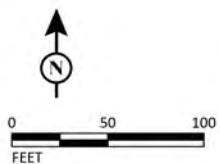
*SR-74 Multi-Asset Management*  
**Jurisdictional Areas**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

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FIGURE 5  
Sheet 18 of 24

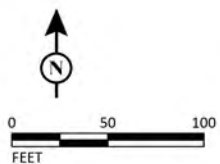
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**Jurisdictional Areas**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)

FIGURE 5  
Sheet 19 of 24






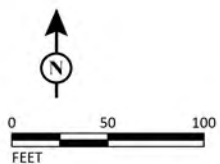
*SR-74 Multi-Asset Management*  
**Jurisdictional Areas**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





-  Project Site
-  Non-jurisdictional Underground Feature
-  Culvert



SOURCE: Nearmap (5/7/2025)

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FIGURE 5  
Sheet 20 of 24

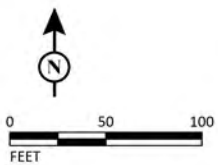
SR-74 Multi-Asset Management  
Jurisdictional Areas

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





- Project Site
- Culvert



SOURCE: Nearmap (5/7/2025)

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FIGURE 5  
Sheet 21 of 24

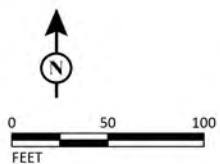
*SR-74 Multi-Asset Management*  
Jurisdictional Areas

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





- Project Site
- Non-jurisdictional Underground Feature
- Culvert
- Jurisdictional Features**
- CDFW Streambed/USACE Non-jurisdictional Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (11/7/2025)

FIGURE 5  
Sheet 22 of 24



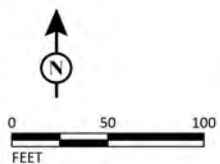
*SR-74 Multi-Asset Management*  
**Jurisdictional Areas**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





-  Project Site
-  Low Flow Channel
- Jurisdictional Features**
  -  CDFW Riparian
  -  CDFW Streambed
  -  CDFW Streambed/USACE Nonwetland Waters/RWQCB Nonwetland Waters



SOURCE: Nearmap (5/7/2025)

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FIGURE 5  
Sheet 23 of 24



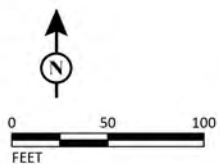
*SR-74 Multi-Asset Management*  
**Jurisdictional Areas**

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





- Project Site
- Non-jurisdictional Underground Feature
- Culvert



SOURCE: Nearmap (5/7/2025)

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FIGURE 5  
Sheet 24 of 24

*SR-74 Multi-Asset Management*  
Jurisdictional Areas

12-ORA-SR7473 – PM 0.0-11.5  
EA 0R990 1219000072





**Photo 1:** View of Feature 1 that is partially concrete and earthen drainage.



**Photo 2:** View of Feature 4 that is an earthen drainage channel.



**Photo 3:** View of Feature 5 that is a concrete/cobble, shallow drainage channel.



**Photo 4:**View of Feature 2 that is a concrete, rectangular drainage channel that has riparian vegetation present outside of the channel but within the JDSA.

**FIGURE 6**  
Page 1 of 5



**Photo 5:** View of Feature 6 that is a concrete, trapezoidal drainage channel.



**Photo 6:** View of Feature 7 that is a concrete v-ditch.



**Photo 7:** View of Feature 8's low flow channel.



**Photo 8:** Overview of Feature 8 that is San Juan Creek, a naturally occurring, earthen creek.

**FIGURE 6**  
Page 2 of 5





**Photo 9:** View of Feature 9 that an earthen, rip-rap lined, concave catch basin.



**Photo 10:** View of Feature 13 that is a concrete v-ditch that catches flows from a culvert.



**Photo 11:** View of Feature 15 that is an earthen drainage channel that drains from a corrugated metal pipe culvert.



**Photo 12:** View of Feature 20 that is an earthen drainage channel that flows from an 8 x 8 ft concrete box culvert under SR-74.

**FIGURE 6**  
Page 3 of 5



**Photo 13:** View of Feature 22 that is 12 ft concrete box culvert with an earthen drainage channel on either side of the culvert.



**Photo 14:** View of Feature 23 that is an earthen drainage channel.



**Photo 15:** View of Feature 26 that is an earthen drainage channel.



**Photo 16:** View of Feature 27 that is a natural, earthen drainage channel and conveys runoff directly to San Juan Creek.

**FIGURE 6**  
Page 4 of 5





**Photo 17:** View of Feature 29 that is a concrete v-ditch.



**Photo 18:** View of Feature 30 that is San Juan Creek, a naturally occurring creek. This portion of San Juan Creek is earthen.

**FIGURE 6**  
Page 5 of 5

## **Appendix E:** Coastal California Gnatcatcher Survey Report



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August 12, 2025

Jess Sattler  
United States Fish and Wildlife Service  
Carlsbad Field Office  
2177 Salk Avenue, Suite 250  
Carlsbad, CA 92008

Chad Hirano  
Wildlife Diversity Program  
California Department of Fish and Wildlife  
1010 Riverside Parkway  
West Sacramento, CA 95605

Subject: Protocol Presence/Absence Survey Results for the Coastal California Gnatcatcher along SR-74, Orange County, California (LSA Project No. CDT2201.32)

Dear Ms. Sattler and Mr. Hirano:

This letter report documents the results of a protocol coastal California gnatcatcher (*Poliophtila californica californica*) survey conducted by LSA along SR-74 for proposed maintenance work along the road within Caltrans right of way. The project site is located along SR-74, from I-5 to 1.0-mile east of San Juan Creek as shown on San Juan Capistrano and Canada Gobernadora, California 7.5-minutes series U.S. Geological Survey (USGS) topographic maps (refer to Figure 1, attached). No coastal California gnatcatchers were detected during the protocol survey (Figure 2).

The land adjacent to the project is primarily developed areas in San Juan Capistrano and open space east of there with a portion adjacent to Caspers Regional Park.

## SURVEY AREA

The Survey areas are approximately 7 acres. Elevations range from approximately 115 to 420 feet above mean sea level. The land adjacent to the project is primarily within Caltrans right-of-way or protected open space. The habitat types included in the survey area are Coastal Sage Scrub and some of the Chaparral.

## METHODS

LSA sent a presurvey notification letter dated May 12, 2025, to the California Department of Fish and Wildlife (CDFW) and the United States Fish and Wildlife Service (USFWS). The survey consisted of six site visits following the 1997 United States Fish and Wildlife Service (USFWS) California gnatcatcher survey guidelines for breeding season surveys. The survey was conducted by Eric Krieg pursuant to LSA's Federal Fish and Wildlife 10(a)(1)A) Permit TE-777965 and an attachment to CDFW Scientific Collecting Permit SC-000777 providing Conditions for Research on Listed Birds (February 14, 2018–February 14, 2021; renewal underway).

During each survey, LSA biologist walked slowly throughout the portions of the survey areas that support potential suitable habitat for coastal California gnatcatchers. A taped recording of a coastal California gnatcatcher was played occasionally. Six gnatcatcher surveys were conducted between May 26, and June 30, 2025 (see the following table for details).



Date	Time	Cloud Cover (%) Start/Finish	Wind (mph) Start/Finish	Temperature (°F) Start/Finish	Surveyor
5/26/2025	0630-1200	100/40	3/5	64/73	Eric Krieg
6/2/2025	0630-1200	30/0	2/5	61/75	Eric Krieg
6/9/2025	0630-1200	100/100	3/5	61/71	Eric Krieg
6/16/2025	0630-1200	100/0	1/4	61/79	Eric Krieg
6/23/2025	0630-1200	100/40	3/6	64/72	Eric Krieg
6/30/2025	0630-1200	100/0	1/6	63/76	Eric Krieg

\*F = degrees Fahrenheit  
mph = miles per hour

## RESULTS

No coastal California gnatcatcher was observed along SR-74 within Caltrans right-of-way for the proposed project. A complete list of birds detected during the surveys is provided in Attachment B.

Please contact me at (949) 553-0666 if you have any questions about these survey results.

Sincerely,

**LSA Associates, Inc.**

Eric Krieg  
Associate/Biologist

Attachments: A: Figures  
B: Animal Species Detected

**I CERTIFY THAT THE INFORMATION IN THIS SURVEY REPORT AND ATTACHED EXHIBITS FULLY AND ACCURATELY REPRESENTS MY WORK:**

<b>SURVEYOR:</b>	<b>PERMIT NUMBER:</b>	<b>DATE:</b>
 Eric Krieg	TE-777965-12	AUGUST 12, 2025

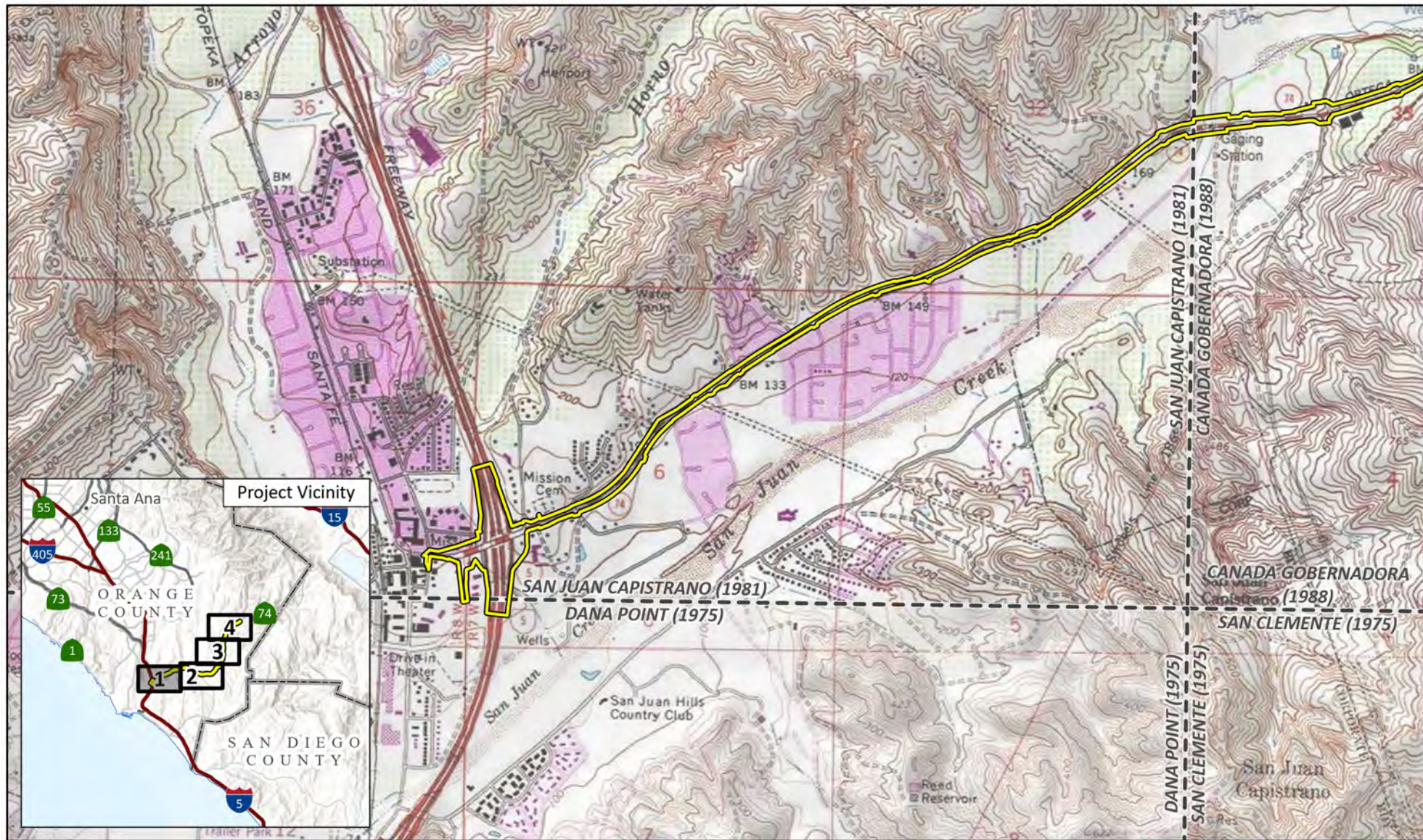
## ATTACHMENT A

### FIGURES

Figure 1 – Project Location

Figure 2 – Project Site





LSA

Project Site



0 1000 2000  
FEET

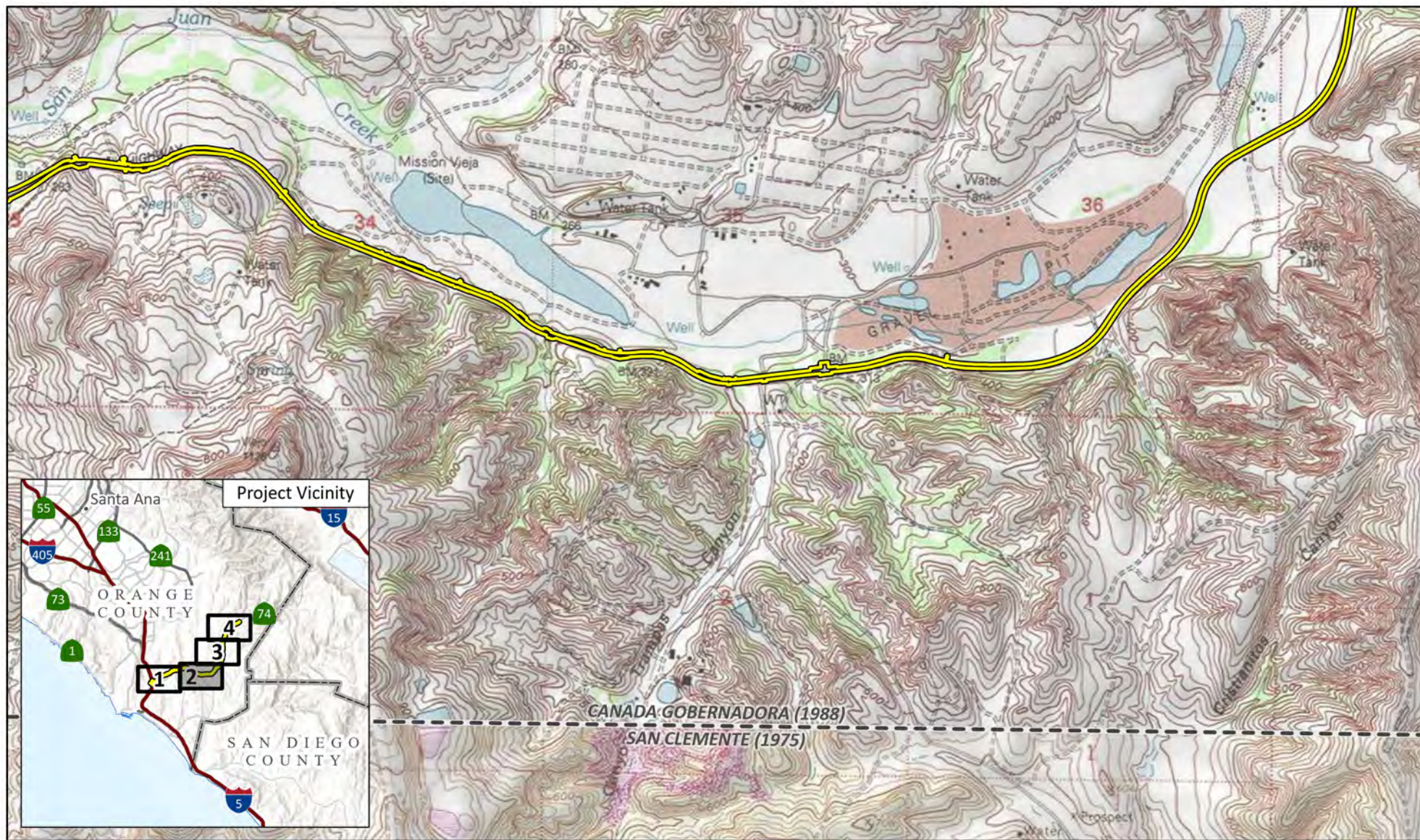
SOURCE: USGS 7.5' Quad - San Juan Capistrano, CA (1975), Dana Point, CA (1975), Canada Gobernadora, CA (1988), San Clemente, CA (1975)

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FIGURE 1  
Sheet 1 of 4

SR-74 Multi-Asset Management  
Project Location





LSA


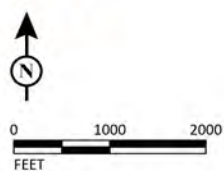
 Project Site

FIGURE 1  
Sheet 2 of 4

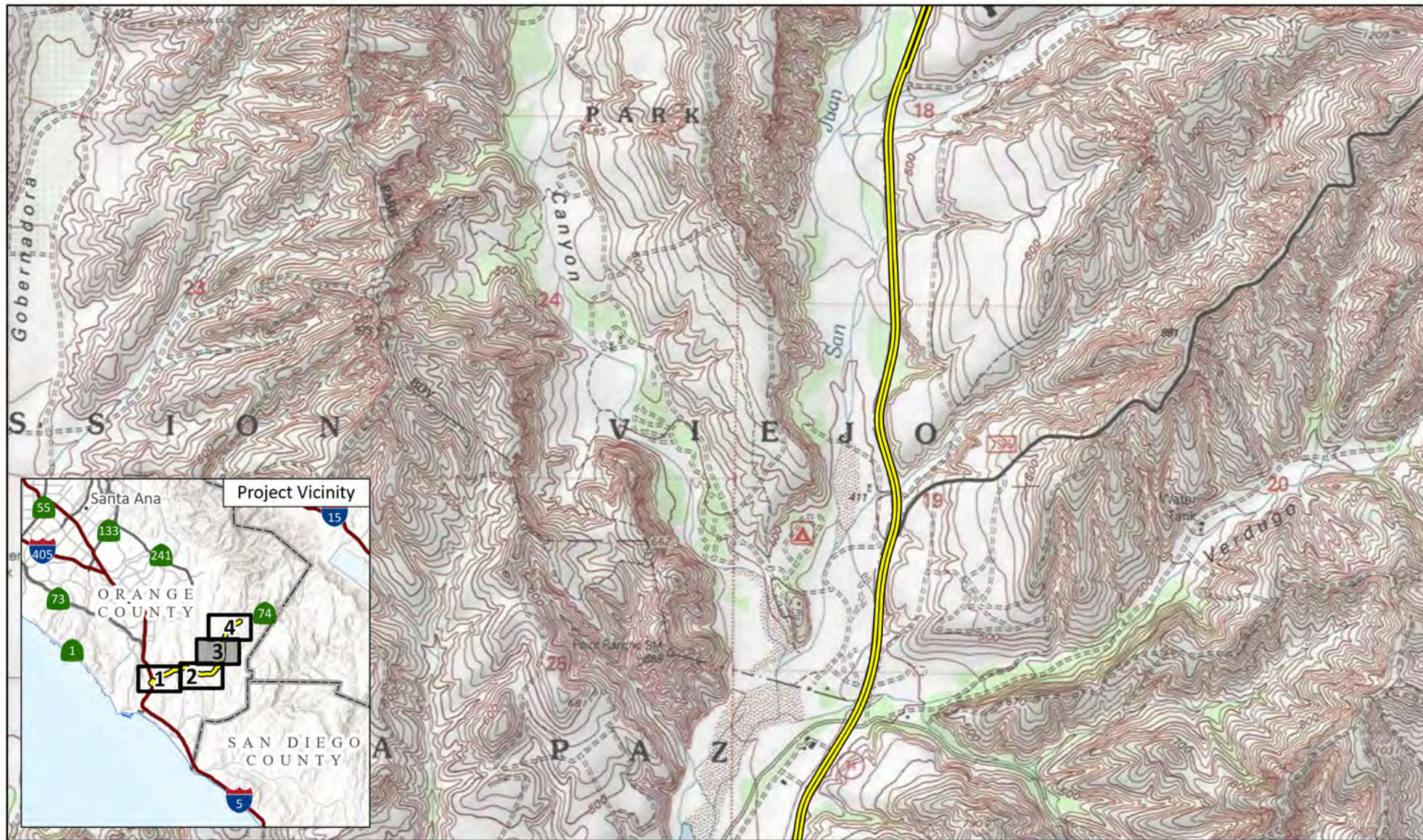


SOURCE: USGS 7.5' Quad - Canada Gobernadora, CA (1988), San Clemente, CA (1975)

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SR-74 Multi-Asset Management  
Project Location





LSA


 Project Site

FIGURE 1  
Sheet 3 of 4



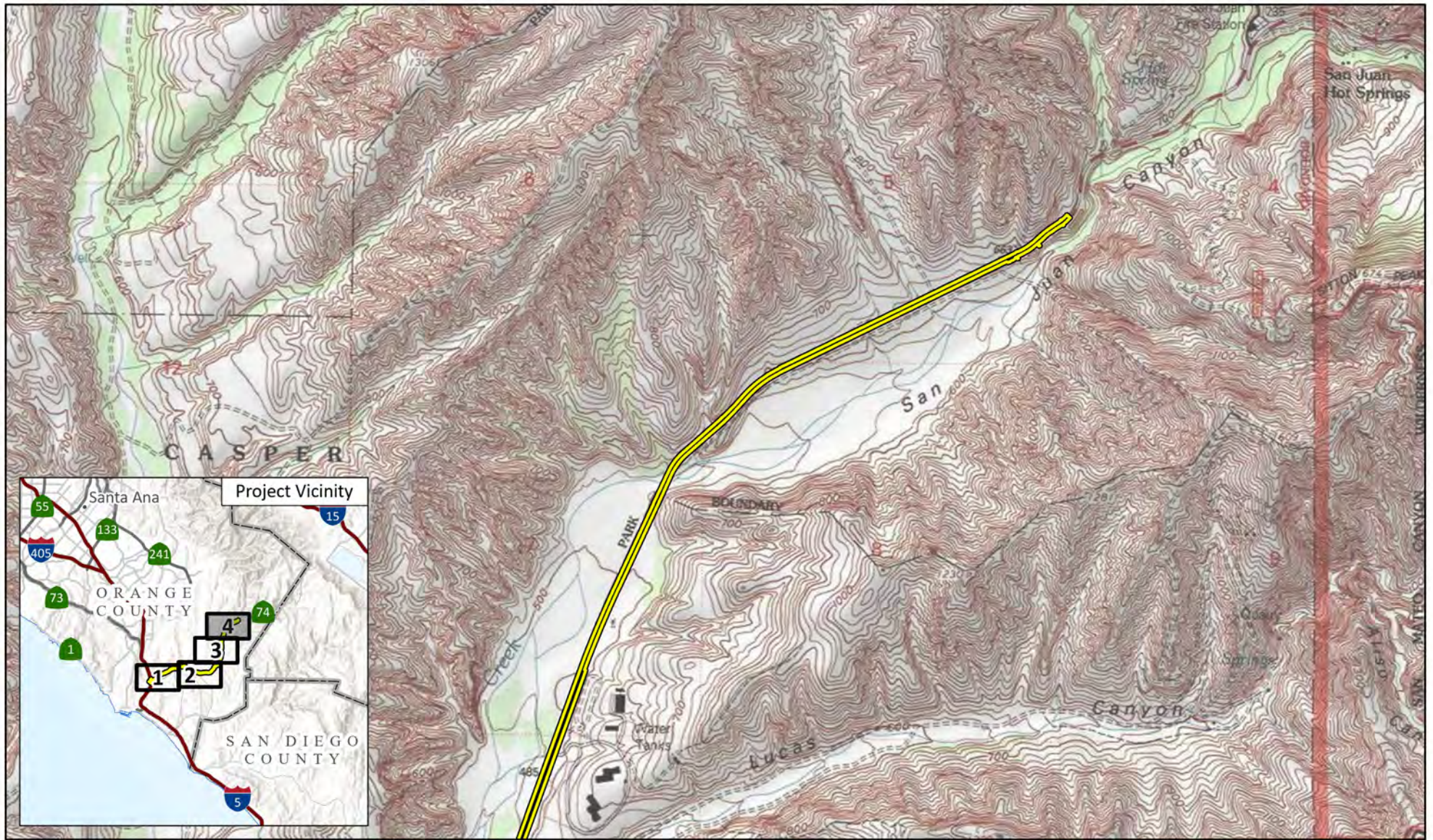
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SOURCE: USGS 7.5' Quad - Canada Gobernadora, CA (1988)

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SR-74 Multi-Asset Management  
Project Location





LSA

Project Site



0 1000 2000  
FEET

SOURCE: USGS 7.5' Quad - Canada Gobernadora, CA (1988)

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FIGURE 1  
Sheet 4 of 4

SR-74 Multi-Asset Management  
Project Location





LSA

Project Site

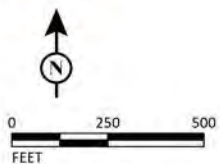
Vegetation

Ornamental - 1.73 ac

Ruderal - 13.03 ac

Developed - 95.57 ac

FIGURE 2  
Sheet 1 of 13



SOURCE: Maxar (2024); Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (8/12/2025)

SR-74 Multi-Asset Management  
Vegetation and Land Cover





LSA

Project Site

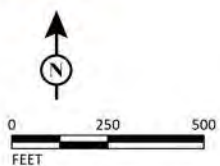
Vegetation

Ornamental - 1.73 ac

Ruderal - 13.03 ac

Developed - 95.57 ac

FIGURE 2  
Sheet 2 of 13

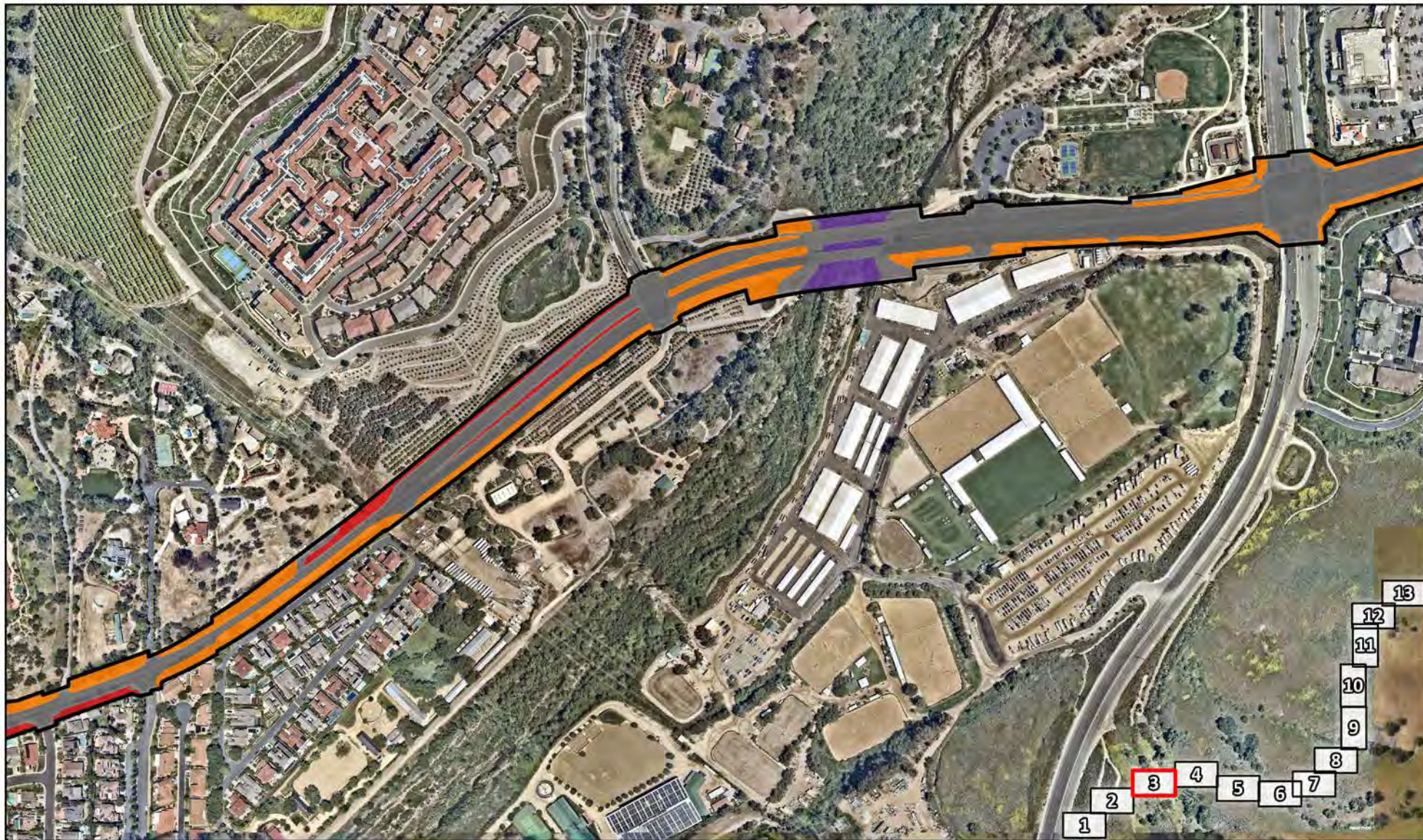


SOURCE: Maxar (2024); Nearmap (5/7/2025)

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SR-74 Multi-Asset Management  
Vegetation and Land Cover





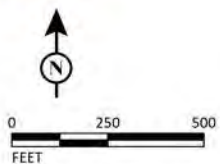
LSA

Project Site

Vegetation

- Sycamore Riparian - 1.08 ac
- Ornamental - 1.73 ac
- Ruderal - 13.03 ac
- Developed - 95.57 ac

FIGURE 2  
Sheet 3 of 13



SOURCE: Maxar (2024); Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (8/12/2025)

SR-74 Multi-Asset Management  
Vegetation and Land Cover





LSA

Project Site

Vegetation

- Coastal Sage Scrub - 0.95 ac
- Chaparral - 10.79 ac
- Coast Live Oak Woodland - 11.89 ac
- Coast Live Oak Riparian - 0.97 ac
- Ruderal - 13.03 ac
- Developed - 95.57 ac



SOURCE: Maxar (2024); Nearmap (5/7/2025)

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FIGURE 2  
Sheet 4 of 13

SR-74 Multi-Asset Management  
Vegetation and Land Cover





LSA

Project Site

Vegetation

- Coastal Sage Scrub - 0.95 ac
- Chaparral - 10.79 ac
- Coast Live Oak Woodland - 11.89 ac
- Coast Live Oak Riparian - 0.97 ac
- Ruderal - 13.03 ac
- Developed - 95.57 ac



SOURCE: Maxar (2024); Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (8/12/2025)

FIGURE 2  
Sheet 5 of 13

SR-74 Multi-Asset Management  
Vegetation and Land Cover





LSA

Project Site

Vegetation

- Coastal Sage Scrub - 0.95 ac
- Chaparral - 10.79 ac
- Coast Live Oak Woodland - 11.89 ac
- Coast Live Oak Riparian - 0.97 ac
- Ruderal - 13.03 ac
- Developed - 95.57 ac



SOURCE: Maxar (2024); Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (8/12/2025)

FIGURE 2  
Sheet 6 of 13

SR-74 Multi-Asset Management  
Vegetation and Land Cover



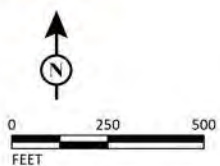


LSA

Project Site

Vegetation

- Coastal Sage Scrub - 0.95 ac
- Chaparral - 10.79 ac
- Coast Live Oak Woodland - 11.89 ac
- Ruderal - 13.03 ac
- Developed - 95.57 ac



SOURCE: Maxar (2024); Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (8/12/2025)

FIGURE 2  
Sheet 7 of 13

SR-74 Multi-Asset Management  
Vegetation and Land Cover



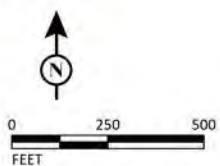


LSA

Project Site

Vegetation

- Chaparral - 10.79 ac
- Coast Live Oak Woodland - 11.89 ac
- Ruderal - 13.03 ac
- Developed - 95.57 ac



SOURCE: Maxar (2024); Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (8/12/2025)

FIGURE 2  
Sheet 8 of 13

SR-74 Multi-Asset Management  
Vegetation and Land Cover



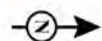


LSA

Project Site

Vegetation

- Coastal Sage Scrub - 0.95 ac
- Chaparral - 10.79 ac
- Coast Live Oak Woodland - 11.89 ac
- Coast Live Oak Riparian - 0.97 ac
- Developed - 95.57 ac



0 250 500  
FEET

SOURCE: Maxar (2024); Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (8/12/2025)

FIGURE 2  
Sheet 9 of 13

SR-74 Multi-Asset Management  
Vegetation and Land Cover





LSA

Project Site

Vegetation

Chaparral - 10.79 ac

Coast Live Oak Woodland - 11.89 ac

Developed - 95.57 ac



0 250 500  
FEET

SOURCE: Maxar (2024); Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (8/12/2025)

FIGURE 2  
Sheet 10 of 13

SR-74 Multi-Asset Management  
Vegetation and Land Cover



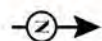


LSA

Project Site

Vegetation

- Coastal Sage Scrub - 0.95 ac
- Chaparral - 10.79 ac
- Coast Live Oak Woodland - 11.89 ac
- Coast Live Oak Riparian - 0.97 ac
- Developed - 95.57 ac



0 250 500  
FEET

SOURCE: Maxar (2024); Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (8/12/2025)

FIGURE 2  
Sheet 11 of 13

SR-74 Multi-Asset Management  
Vegetation and Land Cover



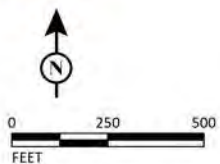


LSA

Project Site

Vegetation

- Coastal Sage Scrub - 0.95 ac
- Chaparral - 10.79 ac
- Coast Live Oak Woodland - 11.89 ac
- Sycamore Riparian - 1.08 ac
- Ruderal - 13.03 ac
- Developed - 95.57 ac



SOURCE: Maxar (2024); Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (8/12/2025)

FIGURE 2  
Sheet 12 of 13

SR-74 Multi-Asset Management  
Vegetation and Land Cover



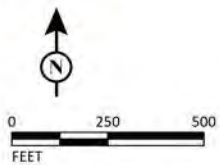


LSA

Project Site

Vegetation

- Coastal Sage Scrub - 0.95 ac
- Chaparral - 10.79 ac
- Ruderal - 13.03 ac
- Developed - 95.57 ac



SOURCE: Maxar (2024); Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (8/12/2025)

FIGURE 2  
Sheet 13 of 13

SR-74 Multi-Asset Management  
Vegetation and Land Cover



## ATTACHMENT B

### BIRD SPECIES DETECTED

Scientific Name	Common Name
<b>Odontophoridae</b>	<b>Grouse, Quail, and Allies</b>
<i>Callipepla californica</i>	California quail
<b>Columbidae</b>	<b>Pigeons and Doves</b>
<i>Columba fasciata</i>	Band-tailed pigeon
<i>Streptopelia decaocto</i> *	Eurasian collared-dove
<i>Zenaida macroura</i>	Mourning dove
<b>Cathartidae</b>	<b>American Vultures</b>
<i>Cathartes aura</i>	Turkey vulture
<b>Accipitridae</b>	<b>Kites, Hawks, and Eagles</b>
<i>Buteo lineatus</i>	Red-shouldered hawk
<b>Picidae</b>	<b>Woodpeckers</b>
<i>Melanerpes formicivorus</i>	Acorn woodpecker
<b>Tyrannidae</b>	<b>Tyrant Flycatchers</b>
<i>Sayornis nigricans</i>	Black phoebe
<b>Corvidae</b>	<b>Crows and Ravens</b>
<i>Aphelocoma californica</i>	California scrub-jay
<i>Corvus brachyrhynchos</i>	American crow
<i>Corvus corax</i>	Common raven
<b>Aegithalidae</b>	<b>Long-tailed Tits</b>
<i>Psaltiriparus minimus</i>	Bushtit
<b>Sylviidae</b>	<b>Sylviid Warblers</b>
<i>Chamaea fasciata</i>	Wrentit
<b>Sturnidae</b>	<b>Starlings</b>
<i>Sturnus vulgaris</i> *	European starling
<b>Fringillidae</b>	<b>Fringilline and Cardueline Finches</b>
<i>Haemorhous mexicanus</i>	House finch
<b>Passerellidae</b>	<b>New World Sparrows</b>
<i>Melospiza melodia</i>	Song sparrow
<i>Melospiza crissalis</i>	California towhee
<i>Pipilo maculatus</i>	Spotted towhee





## **Appendix F: Riparian Birds**



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August 26, 2025

Recovery Permit Coordinator  
United States Fish and Wildlife Service  
Carlsbad Field Office  
fw8\_cfwo\_permits@fws.gov  
2177 Salk Avenue, Suite 250  
Carlsbad, California 92008

Chad Hirano  
Wildlife Diversity Program  
California Department of Fish and Wildlife  
1010 Riverside Parkway  
West Sacramento, California 95605

Subject: Least Bell's Vireo and Southwestern Willow Flycatcher Survey Results for the California Department of Transportation's SR-74 Multi-Asset Management Project (EA OR990) in San Juan Capistrano, Orange County, California (LSA Project No. CDT2201.32)

Dear Recovery Permit Coordinator and Mr. Hirano:

This letter report documents the results of protocol surveys for least Bell's vireo (*Vireo bellii pusillus*) and southwestern willow flycatcher (*Empidonax traillii extimus*) conducted by LSA for the California Department of Transportation's (Caltrans) State Route (SR) 74 Multi-Asset Management Project (project). The project site is located along SR-74, from Interstate (I) 5 to 1 mile east of San Juan Creek as shown on the *San Juan Capistrano* and *Canada Gobernadora, California* 7.5-minutes series United States Geological Survey (USGS) topographic maps (see Figure 1; all figures are provided in Attachment A). The land adjacent to the project is primarily developed areas in San Juan Capistrano and open space east of there, with a portion adjacent to Caspers Regional Park.

The survey results were positive for least Bell's vireo and negative for southwestern willow flycatcher.

## SURVEY AREA

The survey area is an approximately 21.02-kilometer-long segment (approximately 7 acres) within the Caltrans SR-74 right-of-way from I-5 to 1 mile east of San Juan Creek (see Figure 2). Elevations range from approximately 115 to 420 feet above mean sea level. The land adjacent to the project is primarily within Caltrans right-of-way or protected open space. The habitat types included in the survey area are Coast Oak Riparian, Sycamore Riparian, Willow Riparian, Coast Oak Woodland, Coast Oak Woodland, Coastal Sage Scrub, Chaparral, Ruderal, and Developed.

Dominant plant species identified in the riparian habitats within the survey area include arroyo willow (*Salix lasiolepis*), coast live oak (*Quercus agrifolia*), California sycamore (*Platanus racemosa*), Goodding's willow (*Salix gooddingii*), blue elderberry (*Sambucus mexicana*), lemonade berry (*Rhus integrifolia*), and toyon (*Heteromeles arbutifolia*). The riparian habitat understory consists of patches of mule fat (*Baccharis salicifolia*), poison oak (*Toxicodendron pubescens*), and coyote brush (*Baccharis pilularis*).



## METHODS

LSA biologist Denise Woodard, with field assistance from LSA biologist Christina Van Oosten, conducted seven protocol least Bell's vireo surveys from May 30 through July 31, 2025, which also included five protocol southwestern willow flycatcher surveys from May 29 through July 31, 2025. The first least Bell's vireo survey and the first southwestern willow flycatcher survey were initiated on May 30, 2025.

During each of the surveys, the biologists walked slowly along the edge of riparian habitat, listening for least Bell's vireos and southwestern willow flycatchers. A recording of southwestern willow flycatcher songs was played periodically along the survey route during all five flycatcher surveys. The surveying biologists, with the aid of binoculars for viewing wildlife species, waited for several minutes after each playback to look and listen for southwestern willow flycatchers. On concurrent surveys, southwestern willow flycatchers were the focus of the early morning/beginning of the surveys (from the starting point to the end point), and least Bell's vireos were the focus of the surveys from the end point back to the starting point.

Surveys were conducted pursuant to LSA's Federal 10(a)(1)(A) Permit TE 777965 and California Department of Fish and Wildlife (CDFW) attachments to Scientific Collecting Permit SC-000777 providing Conditions for Research on Listed Birds (November 29, 2012–January 31, 2017, renewal pending). Table A shows the survey dates, biologists, times, and weather conditions for each site visit.

**Table A: Survey Dates, Times, and Weather Conditions**

Date (2025)	Biologist(s)	Time (24-hour) Start/Finish	Weather Conditions		
			Cloud Cover (%)	Wind (mph)	Temperature (°F)
May 30	DW, CV	0455/1000	90%	1–3	61–71
June 10	DW, CV	0515/0900	100%, a.m. drizzle	1–3	60–62
June 20	DW, CV	0515/0800	Clear	1–3	65–65
June 30	DW, CV	0500/0845	100%	1–3	63–68
July 11	DW, CV	0500/0830	70%	1–3	66–68
July 21	DW, CV	0500/0830	50%	1–3	66–68
July 31	DW, CV	0500/0915	25%	1–3	62–72

Source: LSA Site Surveys (2025).

°F = degrees Fahrenheit

CV = Christina Van Oosten

DW = Denise Woodard

mph = miles per hour

## RESULTS

One least Bell's vireo was detected (Figure 3 in Attachment A), and no southwestern willow flycatchers were detected. Attachment B provides the Willow Flycatcher Survey and Detection Form.

Two special-status species were detected, yellow warbler (*Dendroica petechial*) and yellow-breasted chat (*Icteria virens*), as shown on Figure 3 in Attachment A. Attachment C provides a compendium of

species observed during the survey. Attachment D provides the California Native Species Field Survey Forms.

Please contact me at (951) 781-9310 or at [denise.woodard@lsa.net](mailto:denise.woodard@lsa.net) if you require any additional information.

Sincerely,

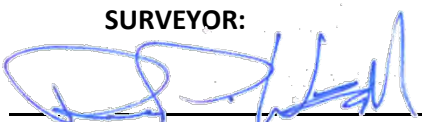
**LSA Associates, Inc.**



Denise Woodard  
Associate/Senior Biologist

Attachments: A – Figures  
B – Willow Flycatcher Survey and Detection Form  
C – Compendium of Species Observed  
D – California Native Species Field Survey Forms

**I CERTIFY THAT THE INFORMATION IN THIS SURVEY REPORT AND ATTACHED EXHIBITS FULLY AND ACCURATELY REPRESENTS MY WORK:**

<b>SURVEYOR:</b>	<b>PERMIT NUMBER:</b>	<b>DATE:</b>
 <hr/> Denise Woodard	TE-777965 <hr/>	August 26, 2025 <hr/>



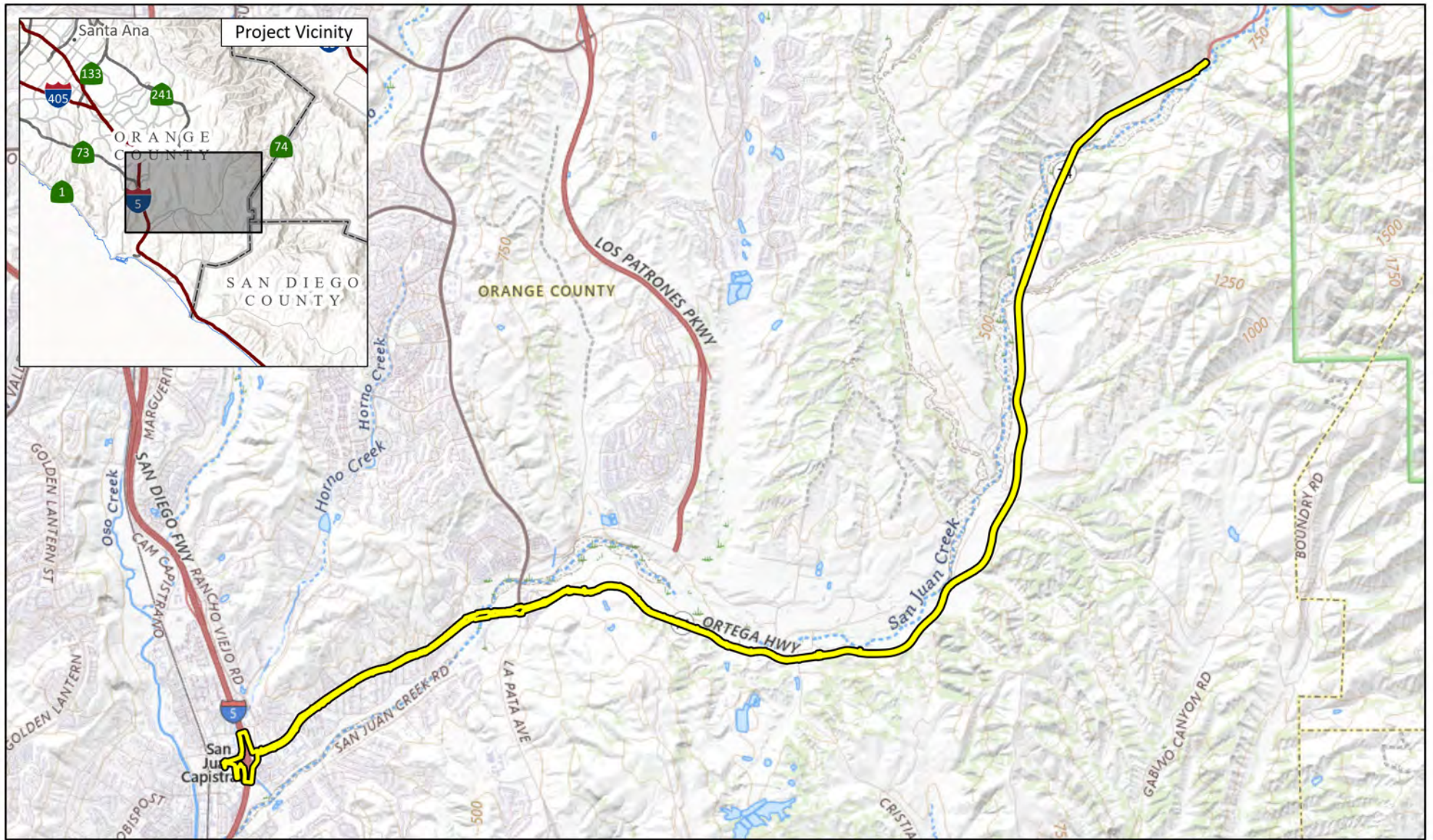
## ATTACHMENT A

### FIGURES

Figure 1: Project Location and Vicinity

Figure 2: Survey Area

Figure 3: Special-Status Species



LSA


 Project Site

FIGURE 1



0 3000 6000  
FEET

SOURCE: USGS The National Map (2025)

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SR-74 Multi-Asset Management  
Project Location

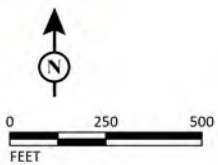




LSA

Project Site

FIGURE 2  
Sheet 1 of 13



SOURCE: Maxar (2024); Nearmap (5/7/2025)

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SR-74 Multi-Asset Management  
Survey Area

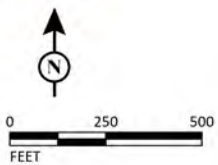




LSA

Project Site

FIGURE 2  
Sheet 2 of 13

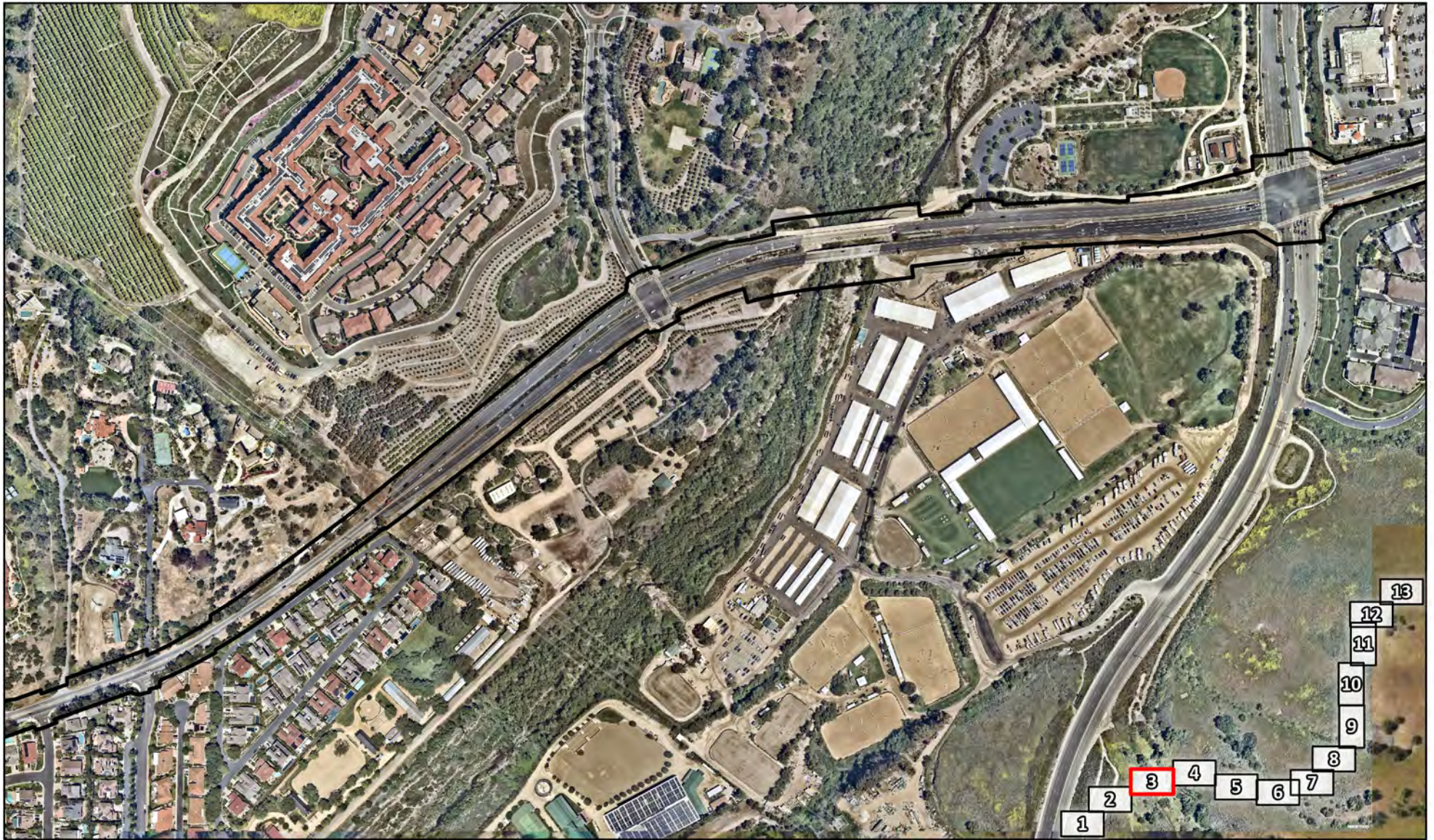


SOURCE: Maxar (2024); Nearmap (5/7/2025)

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SR-74 Multi-Asset Management  
Survey Area

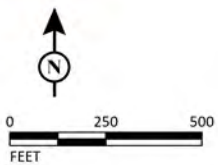




LSA

 Project Site

FIGURE 2  
Sheet 3 of 13



SOURCE: Maxar (2024); Nearmap (5/7/2025)

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SR-74 Multi-Asset Management  
Survey Area





LSA


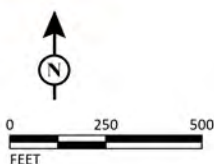
 Project Site

FIGURE 2  
Sheet 4 of 13



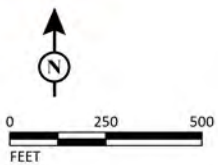




LSA

Project Site

FIGURE 2  
Sheet 5 of 13



SOURCE: Maxar (2024); Nearmap (5/7/2025)

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SR-74 Multi-Asset Management  
Survey Area





LSA


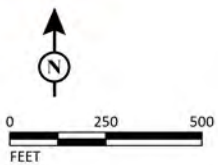
 Project Site

FIGURE 2  
Sheet 6 of 13



SOURCE: Maxar (2024); Nearmap (5/7/2025)

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SR-74 Multi-Asset Management  
Survey Area

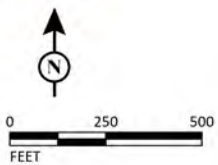




LSA

Project Site

FIGURE 2  
Sheet 7 of 13



SOURCE: Maxar (2024); Nearmap (5/7/2025)

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SR-74 Multi-Asset Management  
Survey Area





LSA


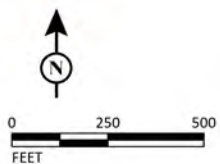
 Project Site

FIGURE 2  
Sheet 8 of 13



SOURCE: Maxar (2024); Nearmap (5/7/2025)

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SR-74 Multi-Asset Management  
Survey Area

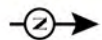




LSA

Project Site

FIGURE 2  
Sheet 9 of 13



0 250 500  
FEET

SOURCE: Maxar (2024); Nearmap (5/7/2025)

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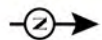
SR-74 Multi-Asset Management  
Survey Area





LSA

Project Site



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SOURCE: Maxar (2024); Nearmap (5/7/2025)

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FIGURE 2  
Sheet 10 of 13

SR-74 Multi-Asset Management  
Survey Area





LSA

Project Site

FIGURE 2  
Sheet 11 of 13



0 250 500  
FEET

SOURCE: Maxar (2024); Nearmap (5/7/2025)

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SR-74 Multi-Asset Management  
Survey Area

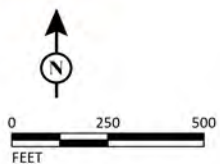




LSA

Project Site

FIGURE 2  
Sheet 12 of 13



SOURCE: Maxar (2024); Nearmap (5/7/2025)

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SR-74 Multi-Asset Management  
Survey Area

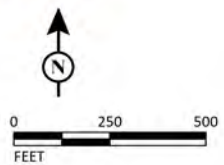




LSA

Project Site

FIGURE 2  
Sheet 13 of 13



SOURCE: Maxar (2024); Nearmap (5/7/2025)

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SR-74 Multi-Asset Management  
Survey Area





LSA

Project Site

Special-status Species

Least Bell's vireo

Yellow-breasted chat

Yellow warbler



0 100 200  
FEET

SOURCE: Maxar (2024); Nearmap (5/7/2025)

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FIGURE 3  
Sheet 1 of 2

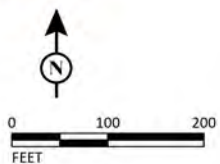
SR-74 Multi-Asset Management  
Special-status Species





LSA

- Project Site
- Special-status Species
- ▲ Yellow-breasted chat
- Yellow warbler



SOURCE: Maxar (2024); Nearmap (5/7/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (8/14/2025)



FIGURE 3  
Sheet 2 of 2

SR-74 Multi-Asset Management  
Special-status Species



## ATTACHMENT B

### WILLOW FLYCATCHER SURVEY AND DETECTION FORM



# Willow Flycatcher (WIFL) Survey and Detection Form (revised April, 2010)

Site Name: California Department of Transportation's State State: California County: Orange  
 USGS Quad Name: San Juan Capistrano and Canada Gobernadora Elevation: 115-420 (meters)  
 Creek, River, or Lake Name: San Juan Creek  
*Is copy of USGS map marked with survey area and WIFL sightings attached (as required)?* Yes X No         
 Survey Coordinates: Start: E 33.50 N -117.66 Datum: WGS84 (See instructions)  
 Stop: E 33.58 N -117.52 Zone: 11

If survey coordinates changed between visits, enter coordinates for each survey in comments section on back of this page.

**\*\*Fill in additional site information on back of this page\*\***

Survey # Observer(s) (Full Name)	Date (m/d/y) Survey Time	Number of Adult WIFLs	Estimated Number of Pairs	Estimated Number of Territories	Nest(s) Found? Y or N  If Yes, number of nests	Comments (e.g., bird behavior; evidence of pairs or breeding; potential threats [livestock, cowbirds, <i>Diorhabda</i> spp.]). If <i>Diorhabda</i> found, contact USFWS and State WIFL coordinator.	GPS Coordinates for WIFL Detections (this is an optional column for documenting individuals, pairs, or groups of birds found on each survey). Include additional sheets if necessary.			
							# Birds	Sex	UTM E	UTM N
Survey # 1 Observer(s): DW, CV	Date: 5/30/2	0	0	0	No		# Birds	Sex	UTM E	UTM N
	Start: 0445									
	Stop: 1000									
	Total hrs: 5:25									
Survey # 2 Observer(s): DW, CV	Date: 6/10/2	0	0	0	No		# Birds	Sex	UTM E	UTM N
	Start: 0515									
	Stop: 0900									
	Total hrs: 3:75:00 AM									
Survey # 3 Observer(s): DW, CV	Date: 6/20/2	0	0	0	No		# Birds	Sex	UTM E	UTM N
	Start: 0515									
	Stop: 0800									
	Total hrs: 2:75:00 AM									
Survey # 4 Observer(s): DW, CV	Date: 6/30/2	0	0	0	No		# Birds	Sex	UTM E	UTM N
	Start: 0500									
	Stop: 0845									
	Total hrs: 3:75:00 AM									
Survey # 5 Observer(s): DW, CV	Date: 7/11/2	0	0	0	No		# Birds	Sex	UTM E	UTM N
	Start: 0500									
	Stop: 0830									
	Total hrs: 3:50									
<b>Overall Site Summary</b> Totals do not equal the sum of each column. Include only resident adults. Do not include migrants, nestlings, and fledglings. Be careful not to double count individuals. Total survey hrs: <span style="border: 1px solid black; padding: 2px;">19</span>		Total Adult Residents	Total Pairs	Total Territories	Total Nests	Were any WIFLs color-banded? Yes <u>      </u> No <u>      </u>  If yes, report color combination(s) in the comments section on back of form and report to USFWS.				
	0	0	0	0						

Reporting Individual: Denise Woodard Date Report Completed: 8/13/2025  
 US Fish & Wildlife Service Permit #: TE-77965 State Wildlife Agency Permit #: Permit SC-000777

**Submit form to USFWS and State Wildlife Agency by September 1st. Retain a copy for your records.**

Fill in the following information completely. Submit form by September 1<sup>st</sup>. Retain a copy for your records.

Reporting Individual Denise Woodard Phone # 951-403-1701  
Affiliation LSA Associates, Inc E-mail denise.woodard@lsa.net  
Site Name Department of Transportation's State Route-74 Multi-Asset Management Date report Completed 8/18/2025  
Was this site surveyed in a previous year? Yes      No      Unknown X  
Did you verify that this site name is consistent with that used in previous yrs? Yes      No      Not Applicable X  
If name is different, what name(s) was used in the past?       
If site was surveyed last year, did you survey the same general area this year? Yes      No X If no, summarize below.  
Did you survey the same general area during each visit to this site this year? Yes X No      If no, summarize below.  
Management Authority for Survey Area: Federal      Municipal/County      State X Tribal      Private       
Name of Management Entity or Owner (e.g., Tonto National Forest) California Department of Transportation

Length of area surveyed: 21.02 (km)

Vegetation Characteristics: Check (only one) category that best describes the predominant tree/shrub foliar layer at this site:

     Native broadleaf plants (entirely or almost entirely, > 90% native)  
X Mixed native and exotic plants (mostly native, 50 - 90% native)  
     Mixed native and exotic plants (mostly exotic, 50 - 90% exotic)  
     Exotic/introduced plants (entirely or almost entirely, > 90% exotic)

Identify the 2-3 predominant tree/shrub species in order of dominance. Use scientific name.

Quercus agrifolia, Sambucus mexicana, Platanus racemosa, Baccharis salicifolia

Average height of canopy (Do not include a range): 8 (meters)

Attach the following: 1) copy of USGS quad/topographical map (REQUIRED) of survey area, outlining survey site and location of WIFL detections;  
2) sketch or aerial photo showing site location, patch shape, survey route, location of any detected WIFLs or their nests;  
3) photos of the interior of the patch, exterior of the patch, and overall site. Describe any unique habitat features in Comments.

Comments (such as start and end coordinates of survey area if changed among surveys, supplemental visits to sites, unique habitat features.  
Attach additional sheets if necessary.

Territory Summary Table. Provide the following information for each verified territory at your site.

Territory Number	All Dates Detected	UTM E	UTM N	Pair Confirmed? Y or N	Nest Found? Y or N	Description of How You Confirmed Territory and Breeding Status (e.g., vocalization type, pair interactions, nesting attempts, behavior)
NONE						

Attach additional sheets if necessary



## ATTACHMENT C

### COMPENDIUM OF SPECIES OBSERVED

This is a list of the conspicuous aerial insects (i.e., damselflies, dragonflies, and butterflies), bony fishes, amphibians, reptiles, birds, and mammals noted in the study area by LSA biologists. Presence may be noted if a species is seen or heard, or identified by the presence of tracks, scat, or other signs. Please note that most species are listed in phylogenetic order of relation.

\* Species not native to the study area

#### AVES

##### Anatidae

*Branta canadensis*

- \* *Alopochen aegyptiacus*
- Anas platyrhynchos*
- Oxyura jamaicensis*

##### Podicipedidae

*Podilymbus podiceps*

##### Columbidae

- \* *Columba livia*
- \* *Streptopelia decaocto*
- Zenaidura macroura*

##### Trochilidae

*Calypte anna*  
*Selasphorus sasin*

##### Rallidae

*Fulica americana*

##### Ardeidae

*Ardea alba*  
*Egretta thula*  
*Bubulcus ibis*  
*Nycticorax nycticorax*

##### Accipitridae

*Buteo lineatus*  
*Buteo jamaicensis*

##### Picidae

*Dryobates pubescens*  
*Dryobates nuttallii*

#### BIRDS

##### Ducks, Geese, and Swans

Canada goose  
Egyptian goose  
Mallard  
Ruddy duck

##### Grebes

Pied-billed grebe

##### Pigeons and Doves

Rock pigeon  
Eurasian collared-dove  
Mourning dove

##### Hummingbirds

Anna's hummingbird  
Allen's hummingbird

##### Rails, Gallinules, and Coots

American coot

##### Herons, Bitterns, and Allies

Great egret  
Snowy egret  
Cattle egret  
Black-crowned night-heron

##### Hawks, Kites, Eagles, and Allies

Red-shouldered hawk  
Red-tailed hawk

##### Woodpeckers and Allies

Downy woodpecker  
Nuttall's woodpecker

**Psittacidae**

- \* *Amazona viridigenalis*

**Tyrannidae**

- Contopus sordidulus*
- Empidonax difficilis*
- Sayornis nigricans*
- Sayornis saya*
- Pyrocephalus rubinus*
- Myiarchus cinerascens*
- Tyrannus vociferans*
- Tyrannus verticalis*

**Vireonidae**

- Vireo gilvus*

**Corvidae**

- Corvus brachyrhynchos*
- Corvus corax*

**Hirundinidae**

- Stelgidopteryx serripennis*

**Aegithalidae**

- Psaltirparus minimus*

**Sylviidae**

- Chamaea fasciata*

**Zosteropidae**

- \* *Zosterops simplex/palpebrosus*

**Troglodytidae**

- Thryomanes bewickii*

**Turdidae**

- Sialia mexicana*
- Catharus guttatus*

**Viduidae**

- \* *Vidua macroura*

**Passeridae**

- \* *Passer domesticus*

**Fringillidae**

- Haemorhous mexicanus*
- Spinus psaltria*
- Spinus lawrencei*
- Spinus tristis*

**African and New World Parrots**

- Red-crowned parrot

**Tyrant Flycatchers**

- Western wood-pewee
- Western Flycatcher
- Black phoebe
- Say's phoebe
- Vermilion flycatcher
- Ash-throated flycatcher
- Cassin's kingbird
- Western kingbird

**Vireos**

- Warbling vireo

**Crows and Jays**

- American crow
- Common raven

**Swallows**

- Northern rough-winged swallow

**Long-Tailed Tits and Bushtits**

- Bushtit

**Sylviid Warblers**

- Wrentit

**White-eyes**

- Swinhoe's/Indian white-eye

**Wrens**

- Bewick's wren

**Thrushes**

- Western bluebird
- Hermit thrush

**Whydahs**

- Pin-tailed whydah

**Old World Sparrows**

- House sparrow

**Fringilline and Cardueline Finches and Allies**

- House finch
- Lesser goldfinch
- Lawrence's goldfinch
- American goldfinch



### Passerellidae

*Junco hyemalis*  
*Melospiza melodia*  
*Melospiza crissalis*  
*Pipilo maculatus*

### Icteridae

*Agelaius phoeniceus*  
*Quiscalus mexicanus*

### Parulidae

*Leiothlypis celata*  
*Geothlypis trichas*  
*Setophaga petechia*  
*Setophaga coronata*

### Cardinalidae

*Pheucticus melanocephalus*  
*Passerina caerulea*

## MAMMALIA

### Leporidae

*Sylvilagus audubonii*

### Sciuridae

\* *Sciurus niger*

### New World Sparrows

Dark-eyed junco  
Song sparrow  
California towhee  
Spotted towhee

### Blackbirds

Red-winged blackbird  
Great-tailed grackle

### Wood Warblers

Orange-crowned warbler  
Common yellowthroat  
Yellow warbler (SSC)  
Yellow-rumped warbler

### Cardinals and Allies

Black-headed grosbeak  
Blue grosbeak

## MAMMALS

### Hares and Rabbits

Audubon's cottontail

### Squirrels, Chipmunks, and Marmots

Eastern fox squirrel

Taxonomy and nomenclature are based primarily on the following:

- **Damselflies and Dragonflies:** Paulson, D. 2009. Dragonflies and Damselflies of the West, Princeton University Press, Princeton, New Jersey.
- **Butterflies:** North American Butterfly Association 2001. NABA Checklist and English Names of North American Butterflies, Second Edition, North American Butterfly Association, Morristown, New Jersey, 2003 update in *American Butterflies* 11: 24-27; see <http://www.naba.org/pubs/checklst.html>.
- **Fishes:** Page, L.M., et al. 2013. Common and Scientific Names of Fishes from the United States, Canada, and Mexico. Seventh Edition. American Fisheries Society Special Publication 34.
- **Amphibians and Reptiles:** Crother, B.I., ed. 2017. Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in our Understanding. Eighth Edition. *Herpetological Circular* 43.) for species taxonomy and nomenclature; AmphibiaWeb (<https://amphibiaweb.org/>) and The Reptile Database ([www.reptile-database.org/](http://www.reptile-database.org/)) for higher order taxonomy; see also California Herps (<http://www.californiaherps.com/index.html>).

- **Birds:** Chesser, R.T., et al. 2021. Checklist of North American Birds (online). American Ornithological Society. <http://checklist.aou.org/taxa>.
- **Mammals:** Bradley, R.D., et al. 2014, Revised Checklist of North American Mammals North of Mexico, 2014. Museum of Texas Tech University Occasional Papers No. 327.



## ATTACHMENT D

### CALIFORNIA NATIVE SPECIES FIELD SURVEY FORMS

For Office Use Only

Source Code \_\_\_\_\_ Quad Code \_\_\_\_\_  
Elm Code \_\_\_\_\_ Occ. No. \_\_\_\_\_  
EO Index No. \_\_\_\_\_ Map Index No. \_\_\_\_\_

Date of Field Work (mm/dd/yyyy): 06/20/2025

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Setophaga petechia*

Common Name: yellow warbler

Species Found? ☐ Yes ☐ No If not, why? \_\_\_\_\_

Total No. Individuals 1 Subsequent Visit? ☒ yes ☐ no

Is this an existing NDDDB occurrence? ☒ no ☐ unk.  
Yes, Occ. # \_\_\_\_\_

Collection? If yes: \_\_\_\_\_  
Number Museum / Herbarium

Reporter: Denise Woodard

Address: 3210 El Camino Real, Ste. 100  
Irvine, CA 92602

E-mail Address: denise.woodard@lsa.net

Phone: (951) 403-1701

Plant Information

Phenology: \_\_\_\_\_% vegetative \_\_\_\_\_% flowering \_\_\_\_\_% fruiting

Animal Information

1  
# adults # juveniles # larvae # egg masses # unknown  
☐ wintering ☒ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Orange County Landowner / Mgr.: California Department of Transportation

Quad Name: San Juan Capistrano and Canada Gobernadora Elevation: 120

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian: ☐ H ☐ M ☐ S Source of Coordinates (GPS, topo. map & type): \_\_\_\_\_

T \_\_\_\_\_ R \_\_\_\_\_ Sec \_\_\_\_\_, \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4, Meridian: ☐ H ☐ M ☐ S GPS Make & Model \_\_\_\_\_

DATUM: NAD27 ☐ NAD83 ☐ WGS84 ☒ Horizontal Accuracy \_\_\_\_\_ meters/feet

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☐ OR Geographic (Latitude & Longitude) ☒

Coordinates: 33.518876, -117.624819

Habitat Description (plants & animals) plant communities, dominants, associates, substrates/soils, aspects/slope:

Animal Behavior (Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):

singing from willows in riparian area

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): ☒ Excellent ☐ Good ☐ Fair ☐ Poor

Immediate AND surrounding land use: open space and residential

Visible disturbances: none

Threats: none

Comments:

Determination: (check one or more, and fill in blanks)

- ☐ Keyed (cite reference): \_\_\_\_\_  
☐ Compared with specimen housed at: \_\_\_\_\_  
☒ Compared with photo / drawing in: Sibley Guide to Birds  
☐ By another person (name): \_\_\_\_\_  
☐ Other: \_\_\_\_\_

Photographs: (check one or more)

	Slide	Print	Digital
Plant / animal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diagnostic feature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

May we obtain duplicates at our expense? yes ☐ no ☐





## **Appendix G:** Oak Tree Inventory Report



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August 21, 2025

Kedest Ketsela  
California Department of Transportation, District 12  
1750 East 4th Street, #100  
Santa Ana, CA 92705

Subject: State Route 74 Multi-Asset Management Project Oak Tree Assessment Report

Dear Ms. Ketsela:

This letter report documents the findings of an on-site oak tree assessment conducted by LSA Associate Biologist Leo Simone (International Society of Arboriculture Certified Arborist WE-8491A) for the State Route 74 (SR-74) Multi-Asset Management Project (project). The oak tree assessment occurred in those areas where project impacts are expected to occur, including areas within the line of sight of proposed signage areas extending from SR-74/Interstate 5 (I-5) Separation (Post Mile [PM] 0.0) to 1.0 mile east of San Juan Creek (PM 11.5) and excluding the segments at PM 1.0/2.1, which are included in project 08692 (See Figure 1; all figures provided in Attachment A). The oak tree survey was only conducted in areas of the project that are off pavement and in the California Department of Transportation (Caltrans) right of way.

This Oak Tree Assessment Report was prepared in accordance with the County of Orange (County) Zoning Code Section 7-9-69, Tree Preservation Ordinance, and documents the findings of the on-site oak tree inventory and assessment conducted by LSA for the purpose of identifying and evaluating all qualifying oak trees within the survey limits of the proposed project.

## INTRODUCTION

LSA inventoried and evaluated 47 coast live oak trees (*Quercus agrifolia*) within the project survey limits. Overall, 16 oak trees were rated Good, 24 oak trees were rated Fair, 6 oak trees were rated Poor, and 1 oak tree was rated Very Poor.

Table A (provided in Attachment B) identifies all oak trees by number, scientific names, and common names and also includes the diameter at breast height (DBH), ratings, and remarks. In addition to Table A, relevant information regarding the oak trees within the survey area is provided below.

The project location map is shown on Figure 1. Figure 2 shows the project survey area boundary and inventory of oak tree locations including their respective oak tree protection zone (TPZ) displayed on an aerial photograph base map at a scale of 1 inch = 100 feet.

## SURVEY AREA

The project site is located along SR-74 from the SR-74/I-5 Separation (PM 0.0) to 1.0-mile East of San Juan Creek (PM 11.5), in Orange County, including San Juan Capistrano and an unincorporated area of Orange County (Figure 2).



## METHODS

LSA evaluated and plotted oak tree locations and TPZ on an aerial photograph and prepared a general arborist report discussing size ranges, health characteristics, and biological resource values.

A table of the oak trees' approximate heights, diameter at breast height (DBH), and an identification number correlating to the aerial photograph are included in the report. The oak tree survey was limited to portions of project that are off pavement.

LSA surveyed and mapped all oak trees within the designated survey area. The on-site oak tree inventory survey was conducted on May 22, 2025, by LSA Associate Biologist Leo Simone (International Society of Arboriculture [ISA] Certified Arborist WE-8491A) (Figure 3). The tree inventory data and physical measurements were taken during the field visit. The project area was surveyed on foot, and all qualifying oak trees within the affected project limits that may be impacted by the project were inventoried, assigned numbers, and evaluated for the following attributes:

- Global positioning system (GPS) location
- Diameter at 4.5 feet above the lowest point where the trunk meets the soil or below the lowest branch point
- Condition: Good, Fair, Poor, or Very Poor
- Other related health or structure information

## DISCUSSION

The 47 oak trees inventoried and evaluated represented a single species of coast live oak. Of the 47 oak trees surveyed, 30 are considered mature with a DBH of 8 inches or greater, and 5 were identified as saplings with trunk diameters of less than 2 inches at 6 inches above the ground surface.

The DBH of the 47 assessed oak trees ranged from less than 1 inch to 84 inches, with the multi-trunked oak tree No. 7 having the greatest girth. Oak tree heights ranged from an estimated 2 feet to 50 feet. With oak sapling No. 13 being the shortest at 2 feet, and oak tree No. 16 being the tallest tree at approximately 50 feet.

## CONCLUSIONS AND RECOMMENDATIONS

At this time, it is unknown how many of the 47 oak trees surveyed will be impacted by the placement of new paving, signage or other construction activities. As such, the surveying arborist mapped the TPZ to assist construction personnel to identify those areas where potential root damage may occur from construction activity. The TPZ is defined as that area within the drip line of a protected tree and extending to a point 5 feet outside the greatest extent of the drip line, or 15 feet from the trunk of a tree, whichever distance is greater.

The County Zoning Code Section 7-9-69, Tree Preservation Ordinance, was developed to ensure protected trees (native oak trees and oak tree hybrids [*Quercus* spp.] with a minimum DBH of 8 inches for single-trunk trees and 12 inches for multi-trunk trees) are preserved and remain healthy. The oak trees and respective TPZ would be exempt from the Tree Preservation Ordinance because they are “maintained by a public utility or any tree on County-owned property for installation of utilities and public facilities and maintenance of property to allow a public utility to fulfill its obligation to provide service to the public.”

It is worth noting that damage to oak trees during roadway construction can be significant causing the failure of the entire tree or tree parts several years after the initial damage, thus becoming a public safety issue.

Damage to oak tree roots may result from any of the following construction related activities:

- **Compaction:** Compacted soils can cause root problems by restricting the oak tree's ability to discharge the gases produced as part of the tree's growth cycle. Continual heavy foot traffic and the heavy equipment used in construction can cause compacted soils. Soils with finer particles (i.e., clay) are more prone to compaction. This can have long-lasting effects, impacting the tree's health for many years.
- **Cutting/Crushing:** Trenching, excavation, and driving over roots can sever or crush roots, impeding the oak tree's ability to absorb water and nutrients.
- **Grade Changes:** Raising or lowering the grade within the TPZ can significantly damage the oak tree's root system.

Additionally, trunk and branch injury from construction may include:

- **Mechanical Damage:** Construction equipment can directly impact trunks and branches, causing wounds that can become entry points for diseases and pests and structurally weaken the tree.

Damaged oak trees are more susceptible to drought, insect infestations, and diseases, leading to decline and possible loss of the tree.

### Recommended Oak Tree Protective Measures

By implementing the following oak tree protective measures and care throughout the construction process, the risk of damage to oak trees can be minimized.

- **Consult Arborists:** Engage with certified arborists to develop protection strategies and provide guidance throughout the construction process.
- **Proper Pruning:**
  - No tree should be pruned without first establishing clearly defined objectives.



- If practicable, pruning cuts should be 2 inches in diameter or smaller. If necessary, the standard could be increased to a maximum of 4 inches, depending on the actual vigor and growth of the tree. Limiting the wound size minimizes the potential for internal decay. Unless there is a strong justification (considering the potential for a decayed column and internal cracking), removing branches larger than 4 inches in diameter should be avoided. The branch may become prone to decay because heartwood has no resistance to the spread of decay and is prone to internal cracking.
- On mature oak trees, compromising on the pruning cut size guidelines should be avoided; doing so will open the tree to decay and internal cracking. This is especially important if the tree is in a stressed state (including limited water or root spread potential), which will make the tree more prone to decay.
- All pruning should be directed by an ISA Certified Arborist and performed in accordance with ISA's Tree Pruning Best Management Practices and adhere to the most recent ANSI guidelines for Tree Care Operations and Pruning, A300—Part 1.
- **Root Protection:**
  - Avoid excavation within the root zone whenever possible.
  - Use tunneling or trenchless techniques when utility installation is necessary near roots.
  - Utilize porous paving materials where feasible to allow water and air to reach the root zone.
  - Minimize changes in soil grade and drainage patterns.
  - In those areas where tree roots cannot be avoided, LSA recommends that a temporary 6-inch mulch layer be placed over the root zone. If trucks or heavy equipment will be driving over the root zone, 3/4-inch plywood should be placed on top of the mulch to further minimize potential root damage. Note that a thick layer of mulching can have detrimental effects on oak tree health if allowed to stay in place for an extended period of time; therefore, the mulch should be removed once construction activities have been completed.
- **Soil Management:** Apply a thick layer of organic mulch around oak trees to reduce compaction and provide a buffer for roots.

It is not possible to determine in advance what extent of injuries would significantly affect the long-term health or cause fatality to an affected oak tree. For example, jagged wounds associated with injury to the oak tree's trunk may interfere with its ability to transport nutrients or may allow increased risk of attacks by parasitic and decay organisms.

It is worth reemphasizing that a tree with damaged roots may not show symptoms of decline for several years. Along with other important functions, roots serve to hold a tree firmly in place. Anything that changes the structural support provided by the root system decreases the stability of the tree. It is usually impossible to predict the exact effect that root damage will have on a particular

tree, or when an effect will occur. A tree may fail a few months or many years following root injury, or it may never fail.

LSA recommends that the above referenced oak trees be inspected periodically during and following construction to monitor their health.

### Federal Migratory Bird Treaty Act

Large oak trees are present within the project limits that may provide nesting habitat for raptors and other migratory birds protected under the federal Migratory Bird Treaty Act. Consequently, it would be prudent to perform any vegetation removal outside the avian nesting period, which typically extends between February and September, or to conduct nesting bird surveys prior to vegetation removal.

Please contact me at (949) 254-1749 if you have any questions about this report.

Sincerely,

**LSA Associates, Inc.**



Leo Simone  
Associate Biologist  
ISA Certified Arborist

Attachments: A: Figures  
B: Table A: Tree Attributes

**I CERTIFY THAT THE INFORMATION IN THIS ARBORICULTURAL TREE REPORT AND ATTACHED EXHIBITS FULLY AND ACCURATELY REPRESENTS MY WORK:**

<b>SURVEYOR:</b>	<b>ISA CERTIFICATION NO.:</b>	<b>DATE:</b>
	<b>WE-8491A</b>	<b>AUGUST 21, 2025</b>



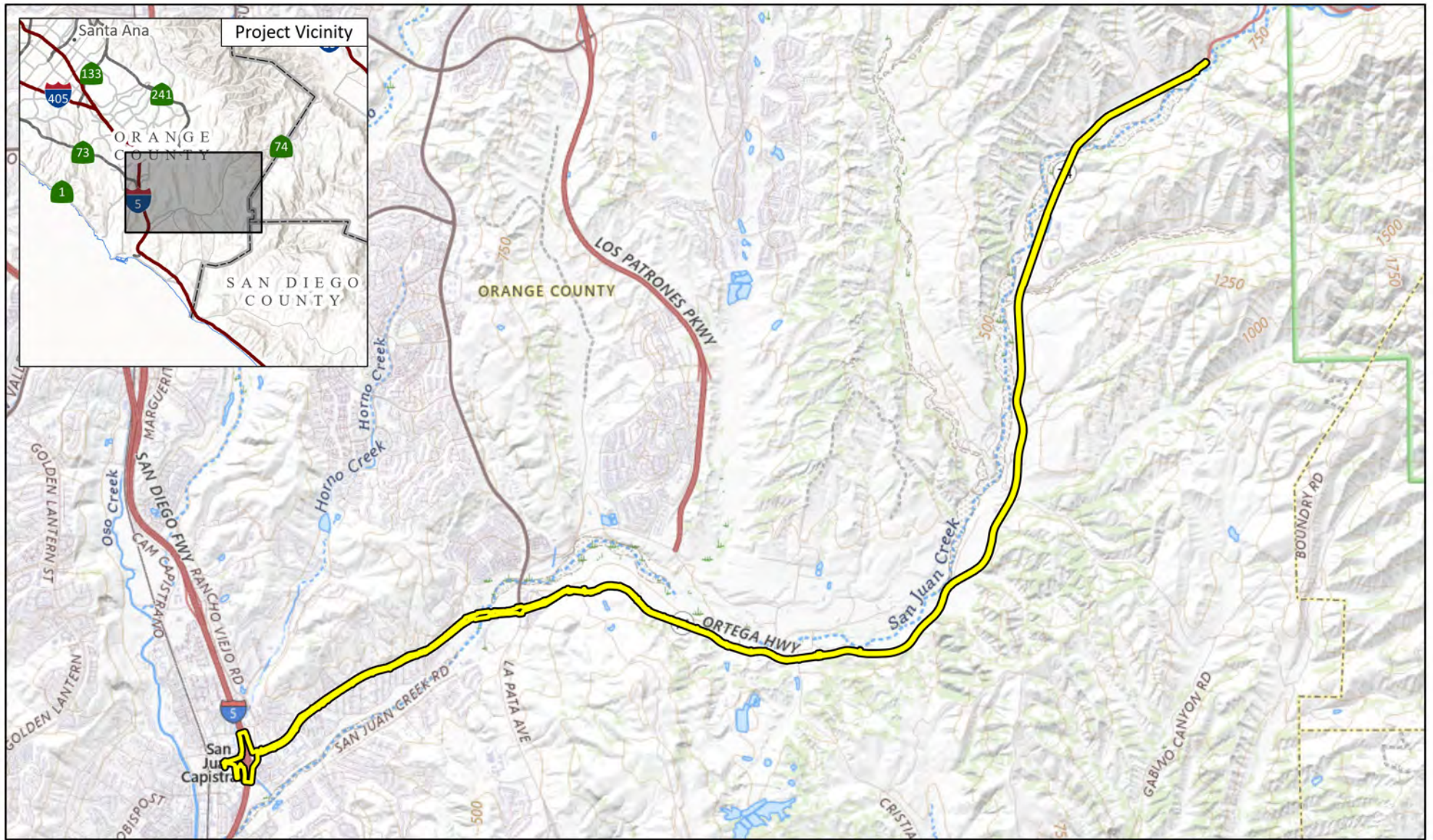
## ATTACHMENT A

### FIGURES

Figure 1: Project Location

Figure 2: Arborist Tree Survey Results

Figure 3: Representative Tree Photographs



LSA


 Project Site

FIGURE 1



0 3000 6000  
FEET

SOURCE: USGS The National Map (2025)

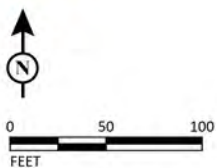
I:\C\CDT2201.32P\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (7/23/2025)

SR-74 Multi-Asset Management  
Project Location





LSA



SOURCE: Nearmap (5/14/2025)

I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (Fig 2 - Arborist Tree Survey Results)  
8/15/2025 2:47 PM

Project Location

Coast Live Oaks

Good Condition

Fair Condition

Poor Condition

Very Poor Condition

Drip Line

15-ft Buffer from Trunk

Tree Protection Zone

FIGURE 2  
Sheet 1 of 7

SR-74 Multi-Asset Management  
Arborist Tree Survey Results






LSA




0 50 100  
FEET


SOURCE: Nearmap (5/14/2025)


I:\C\CDT2201.32\GIS\Pro\SR-74 Multi-Asset Management\SR-74 Multi-Asset Management.aprx (Fig 2 - Arborist Tree Survey Results)  
8/15/2025 2:47 PM


 Project Location


Coast Live Oaks


 Good Condition

 Fair Condition

 Poor Condition

 Very Poor Condition

 Drip Line

 15-ft Buffer from Trunk


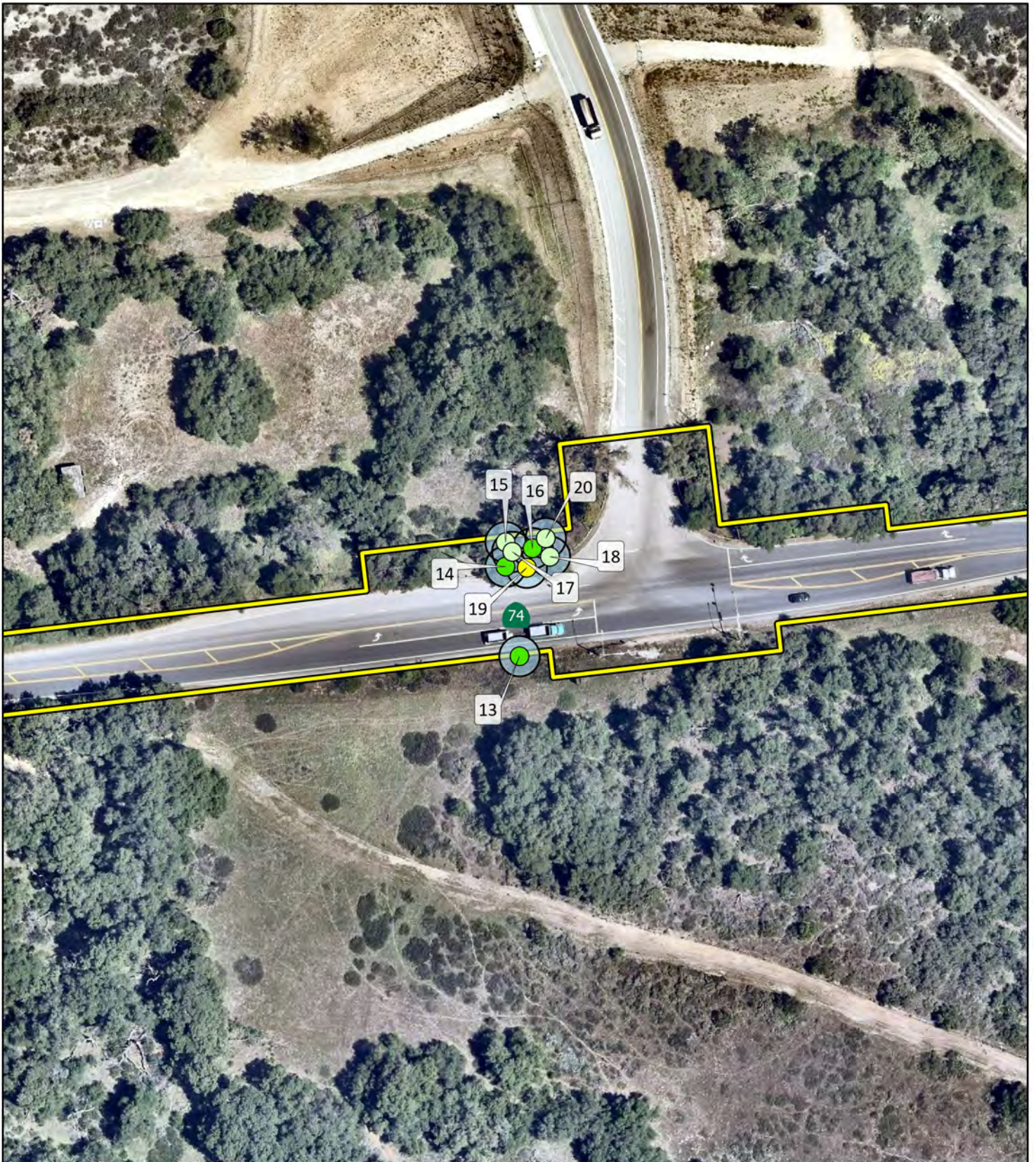
 Tree Protection Zone

FIGURE 2  
Sheet 2 of 7

SR-74 Multi-Asset Management  
Arborist Tree Survey Results





LSA



0 50 100  
FEET

SOURCE: Nearmap (5/14/2025)

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Project Location

Coast Live Oaks

Good Condition

Fair Condition

Poor Condition

Very Poor Condition

15-ft Buffer from Trunk

Tree Protection Zone

FIGURE 2  
Sheet 3 of 7

SR-74 Multi-Asset Management  
Arborist Tree Survey Results





LSA



0 50 100  
FEET

SOURCE: Nearmap (5/14/2025)

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Project Location

Coast Live Oaks

Good Condition

Fair Condition

Poor Condition

Very Poor Condition

Drip Line

15-ft Buffer from Trunk

Tree Protection Zone

FIGURE 2  
Sheet 4 of 7

SR-74 Multi-Asset Management  
Arborist Tree Survey Results






LSA




0 50 100  
FEET


SOURCE: Nearmap (5/14/2025)

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 Project Location


Coast Live Oaks


 Good Condition

 Fair Condition

 Poor Condition

 Very Poor Condition

 Drip Line

 15-ft Buffer from Trunk


 Tree Protection Zone

FIGURE 2  
Sheet 5 of 7

SR-74 Multi-Asset Management  
Arborist Tree Survey Results





LSA



0 50 100  
FEET

SOURCE: Nearmap (5/14/2025)

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Project Location

Coast Live Oaks

Good Condition

Fair Condition

Poor Condition

Very Poor Condition

Drip Line

15-ft Buffer from Trunk

Tree Protection Zone

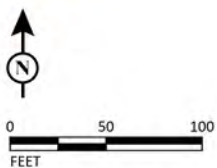
FIGURE 2  
Sheet 6 of 7

SR-74 Multi-Asset Management  
Arborist Tree Survey Results





LSA



SOURCE: Nearmap (5/14/2025)

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Project Location

Coast Live Oaks

Good Condition

Fair Condition

Poor Condition

Very Poor Condition

Drip Line

15-ft Buffer from Trunk

Tree Protection Zone

FIGURE 2  
Sheet 7 of 7

SR-74 Multi-Asset Management  
Arborist Tree Survey Results





**Tree 1: Coast live oak in good condition.**



**Tree 2: Coast live oak in poor condition.**



**Tree 3: Coast live oak in poor condition.**



**Tree 4: Coast live oak in good condition.**



**Tree 5: Coast live oak in good condition.**



**Tree 6: Coast live oak in good condition.**



**Tree 7: Coast live oak in good condition.**



**Tree 8: Coast live oak in good condition.**



**Tree 9: Coast live oak in good condition.**



**Tree 10: Coast live oak in fair condition.**



**Tree 11: Coast live oak in good condition.**



**Tree 12: Coast live oak in good condition.**





**Tree 13: Coast live oak in good condition.**



**Tree 14: Coast live oak in good condition.**



**Tree 15: Coast live oak in fair condition.**



**Tree 16: Coast live oak in good condition.**



**Tree 17: Coast live oak in fair condition.**



**Tree 18: Coast live oak in fair condition.**



**Tree 19: Coast live oak in poor condition.**



**Tree 20: Coast live oak in fair condition.**



**Tree 21: Coast live oak in good condition.**



**Tree 22: Coast live oak in fair condition.**



**Tree 23: Coast live oak in good condition.**



**Tree 24: Coast live oak in good condition.**





**Tree 25: Coast live oak in fair condition.**



**Tree 26: Coast live oak in good condition.**



**Tree 27: Coast live oak in fair condition.**



**Tree 28: Coast live oak in fair condition.**



**Tree 29: Coast live oak in fair condition.**



**Tree 30: Coast live oak in fair condition.**



**Tree 31: Coast live oak in fair condition.**



**Tree 32: Coast live oak in fair condition.**



**Tree 33: Coast live oak in fair condition.**



**Tree 34: Coast live oak in fair condition.**



**Tree 35: Coast live oak in poor condition.**



**Tree 36: Coast live oak in fair condition.**





**Tree 37: Coast live oak in poor condition.**



**Tree 38: Coast live oak in very poor condition.**



**Tree 39: Coast live oak in poor condition.**



**Tree 40: Coast live oak in fair condition.**



**Tree 41: Coast live oak in fair condition.**



**Tree 42: Coast live oak in fair condition.**



**Tree 43: Coast live oak in fair condition.**



**Tree 44: Coast live oak in fair condition.**



**Tree 45: Coast live oak in fair condition.**



**Tree 46: Coast live oak in fair condition.**



**Tree 47: Coast live oak in fair condition.**



## ATTACHMENT B

### TABLE A: TREE ATTRIBUTES



Table A: Tree Attributes

Tree No.	Scientific Name	Common Name	DBH (inches)	Height (ft)	Canopy Spread (ft)	Condition	Remarks
1	<i>Quercus agrifolia</i>	Coast live oak	5 trunks = 28	20	25	Good	Multi-trunk, unable to measure due to wired fence
2	<i>Quercus agrifolia</i>	Coast live oak	5, 2 = 7	18	18	Poor	Co-dominate trunk w/ included bark
3	<i>Quercus agrifolia</i>	Coast live oak	0.5, 0.5, 1 = 2	10	10	Poor	Multi-trunk
4	<i>Quercus agrifolia</i>	Coast live oak	3.5	15	15	Good	
5	<i>Quercus agrifolia</i>	Coast live oak	2, 1.5 = 3.5	9	10	Good	Sapling, multi-trunk
6	<i>Quercus agrifolia</i>	Coast live oak	< 1	5	4	Good	Sapling
7	<i>Quercus agrifolia</i>	Coast live oak	38, 28, 18 = 84	40	55	Good	Multi-trunk
8	<i>Quercus agrifolia</i>	Coast live oak	15, 15 = 30	20	35	Good	Multi-trunk
9	<i>Quercus agrifolia</i>	Coast live oak	< 1	4	4	Good	Sapling, Possible planted for mitigation, oak with cage around
10	<i>Quercus agrifolia</i>	Coast live oak	4	25	15	Fair	
11	<i>Quercus agrifolia</i>	Coast live oak	20, 15 = 35	40	50	Good	Multi-trunk
12	<i>Quercus agrifolia</i>	Coast live oak	< 1	4	2	Good	Sapling, Possible planted for mitigation, oak with cage around
13	<i>Quercus agrifolia</i>	Coast live oak	< 1	2	1	Good	Sapling
14	<i>Quercus agrifolia</i>	Coast live oak	15	35	30	Good	
15	<i>Quercus agrifolia</i>	Coast live oak	15, 12 = 27	40		Fair	Significant cubicle brown rot on tree
16	<i>Quercus agrifolia</i>	Coast live oak	22	50	50	Good	
17	<i>Quercus agrifolia</i>	Coast live oak	16	40	60	Fair	
18	<i>Quercus agrifolia</i>	Coast live oak	19.5	45	70	Fair	
19	<i>Quercus agrifolia</i>	Coast live oak	2.5	8	5	Poor	
20	<i>Quercus agrifolia</i>	Coast live oak	11, 13.5 = 24.5	30	30	Fair	Multi-trunk, significant cubicle brown rot on tree
21	<i>Quercus agrifolia</i>	Coast live oak	12, 15, 20, 20 = 67	30	30	Good	Multi-trunk
22	<i>Quercus agrifolia</i>	Coast live oak	9.5, 9 = 18.5	45	40	Fair	
23	<i>Quercus agrifolia</i>	Coast live oak	20	10	25	Good	
24	<i>Quercus agrifolia</i>	Coast live oak	7, 11.5 = 18.5	25	30	Good	Multi-trunk
25	<i>Quercus agrifolia</i>	Coast live oak	5			Fair	Sprouting from previous cuts
26	<i>Quercus agrifolia</i>	Coast live oak	2, 7, 7 = 16	25	30	Good	Multi-trunk
27	<i>Quercus agrifolia</i>	Coast live oak	8	30	20	Fair	
28	<i>Quercus agrifolia</i>	Coast live oak	10, 5, 5, 3, 3, 2 = 28			Fair	Multi-trunk
29	<i>Quercus agrifolia</i>	Coast live oak	4	12	12	Fair	
30	<i>Quercus agrifolia</i>	Coast live oak	2, 2 = 4	12	12	Fair	Multi-trunk
31	<i>Quercus agrifolia</i>	Coast live oak	30.5	35	35	Fair	Carpenter ants observed on tree
32	<i>Quercus agrifolia</i>	Coast live oak	18, 12, 20.5 = 50.5	40	40	Fair	Multi-trunk
33	<i>Quercus agrifolia</i>	Coast live oak	25.5	25	30	Fair	
34	<i>Quercus agrifolia</i>	Coast live oak	6, 9 = 15	15	15	Fair	Multi-trunk
35	<i>Quercus agrifolia</i>	Coast live oak	19	15	15	Poor	
36	<i>Quercus agrifolia</i>	Coast live oak	20	40	40	Fair	
37	<i>Quercus agrifolia</i>	Coast live oak	19, 12, 2, 2, 1 = 36	25	25	Poor	Multi-trunk bark beetle damage observed
38	<i>Quercus agrifolia</i>	Coast live oak	45	35	30	Very Poor	

**Table A: Tree Attributes**

Tree No.	Scientific Name	Common Name	DBH (inches)	Height (ft)	Canopy Spread (ft)	Condition	Remarks
39	<i>Quercus agrifolia</i>	Coast live oak	20	35	35	Poor	Cubicle brown rot
40	<i>Quercus agrifolia</i>	Coast live oak	NA	35	35	Fair	Top of cut bank
41	<i>Quercus agrifolia</i>	Coast live oak	12	20	20	Fair	
42	<i>Quercus agrifolia</i>	Coast live oak	NA	35	40	Fair	Top of cut no access
43	<i>Quercus agrifolia</i>	Coast live oak	15	25	25	Fair	Bark beetle damage
44	<i>Quercus agrifolia</i>	Coast live oak	NA	20	20	Fair	Top of cut no access
45	<i>Quercus agrifolia</i>	Coast live oak	5, 2, 2, 2 = 11	5	10	Fair	Multi-trunk
46	<i>Quercus agrifolia</i>	Coast live oak	10, 13 = 23	40	40	Fair	
47	<i>Quercus agrifolia</i>	Coast live oak	7	30	25	Fair	

Source: Compiled by LSA (2025).

DBH = diameter at breast height

ft = feet

NA = Not Available

< = Less than





## **Appendix H:** Representative Site Photographs



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**Photo 1:** View along SR-74, facing east.



**Photo 2:** View along SR-74, facing west.



**Photo 3:** View along SR-74, facing east.



**Photo 4:** View along SR-74, facing east.





**Photo 5:** View along SR-74, facing southwest.



**Photo 6:** View along SR-74, facing south.



**Photo 7:** View along SR-74, facing north.



**Photo 8:** View along SR-74, facing north.

## **Appendix I: Avoidance & Minimization Measures**

- BIO-1 Delineation of Environmentally Sensitive Areas.** Prior to construction, highly visible barriers (e.g., orange construction fencing) will be installed along the boundaries of the project footprint to designate Environmentally Sensitive Areas (ESAs) that are to be preserved. ESA habitats that will be subjected to impacts and preserved with fencing include coastal sage scrub, chaparral and coast live oak habitat types. No project activity of any type will be permitted within these ESAs. In addition, heavy equipment, including motor vehicles, will not be allowed to operate within the ESAs. All construction equipment will be operated in a manner so as to prevent accidental damage to ESAs. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within these protected zones. Silt fence barriers will be installed at the ESA boundary to prevent accidental deposition of fill material in areas where vegetation is immediately adjacent to construction activities.
- BIO-2 Invasive Species Control.** All construction equipment accessing unpaved areas will be cleaned with water prior to delivery on site to remove dirt, seeds, vegetative material, or other debris that could contain or hold seeds of noxious weeds before arriving to and leaving the project site.
- BIO-3 Best Management Practices (BMPs) During Construction.** All equipment maintenance, staging, and dispensing of fuel, oil, or any other such activities will occur in developed or designated non-sensitive upland areas. The designated upland areas will be located in such a manner as to prevent any spill runoff from entering adjacent sensitive vegetation communities. Trash and food waste will be removed from work sites on a daily basis to avoid the attraction of predators that prey on sensitive wildlife species.
- BIO-4 Erosion Control Material Sourcing.** Only certified weed-free straw, mulch, and/or fiber rolls will be used for erosion control. Invasive species will not be used in any landscaping palettes for the project.
- BIO-5 Biological Monitoring.** If vegetation removal shall occur within suitable nesting habitat during the nesting bird season (February 1–September 30), a qualified biologist will monitor construction activities prior to and during vegetation removal for the duration of the project to ensure that practicable measures are being employed to avoid and minimize incidental disturbance of habitat and covered species inside and outside the project footprint.



- BIO-6      **Avoidance of Native Tree Dripline.**** If ground disturbance is to occur within dripline of Oak tree, ESA fencing will be installed around the dripline of retained oak trees to avoid or minimize unnecessary encroachment and prohibit mechanical activity within the root zone. No construction activities, access or placement of structures should occur within the root zone of any retained oak trees. Landscaping, trenching, or irrigation systems should not be installed within the root zone of any retained oak trees. Sedimentation and siltation should be controlled to avoid filling within the root zone or around the base of any retained trees.
- BIO-7      **Monitor Retained Oak Trees.**** Monitor retained oak trees adjacent to the project during grading and construction activities. Monitoring of retained oak trees should occur at intervals warranted by the site conditions and level of activity. A qualified arborist should conduct all monitoring.
- BIO-8      **Conduct Pruning of Retained Oak Trees According to Approved Standards.**** All pruning should be directed by an International Society of Arboriculture (ISA) certified arborist and performed by ISA-certified tree workers in accordance with the BMPs for Pruning by the ISA and should adhere to the most recent editions of the American National Standards Institute (ANSI) for Tree Care Operations and Pruning A300, Part 1.
- BIO-9      **Water Quality Certification.**** Prior to initiation of construction, Caltrans will coordinate with San Diego RWQCB to determine the need for a Waste Discharge Requirement from the Santa Ana Regional Water Quality Control Board. Upon completion of the coordination effort, Caltrans may need to comply with any conditions and measures identified in the Certification.
- BIO-10      **Streambed Alteration Agreement.**** Due to limited activities and very minimal impacts (0.001 acre of temporary impacts) to non-riparian streambed, the project isn't expected to result in substantially divert or obstructing the natural flow; substantially change or use any material from the bed, bank; or deposit or dispose of debris, waste, or other material where it may pass into any river, stream, or lake. Prior to initiation of construction, Caltrans will coordinate with CDFW to determine the need for a Streambed Alteration Agreement (SAA). Upon completion of the coordination effort with the California Department of Fish and Wildlife (CDFW), Caltrans may need to comply with any specifications, conditions, and measures identified in the SAA.
- BIO-11      **Avoidance of Breeding Season and Nesting Bird Surveys.**** Vegetation clearing and grubbing as well as pavement grinding activities shall occur outside the nesting season (February 1–

September 30) to the fullest practicable extent. If project activities with potential to indirectly disturb suitable avian nesting habitat within the BSA would occur during the nesting season (as determined by a qualified biologist), a qualified biologist with experience in conducting breeding bird surveys will conduct a nesting bird survey no more than 3 days prior to the initiation of project activities to detect the presence/absence of migratory and resident bird species occurring in suitable nesting habitat. Should nesting birds be found, an exclusionary buffer will be established by the qualified biologist. This buffer will be clearly marked in the field by construction personnel under the guidance of the biologist, and construction and access will not be allowed in this zone until the biologist determines that the young have fledged or the nest is no longer active.

- BIO-12      Arroyo Toad Exclusionary Fencing.** All drainage, conduit (located within critical habitat) and guardrail upgrade construction activity areas shall be limited to the impact boundaries by installing exclusionary fencing (i.e., silt fence or other suitable non-penetrable fencing) along the boundary to prevent construction from encroaching into adjacent areas and to exclude ARTO from the construction site.
- BIO-13      Arroyo Toad Biological Monitor.** A USFWS-approved Biologist permitted to handle ARTO shall monitor all construction activities listed above and located within and adjacent to suitable habitat. The ARTO monitoring shall occur weekly if construction activities occur outside the breeding season. If ARTO are found, the qualified Biologist may relocate them out of harm's way to reduce injury or mortality from equipment, foot traffic, or ground disturbance. Field notes and weekly memos will be provided to Caltrans detailing monitoring items and fence conditions.
- BIO-14      Worker Environmental Awareness Program.** Prior to construction, a qualified biologist shall provide a worker environmental awareness program (WEAP) for listed species that may be affected by the project. The program shall be presented to all personnel working on site during construction.
- BIO-15      Construction Lighting and Staging.** Construction equipment maintenance, lighting, and staging must be in designated areas and away from wildlife undercrossings.
- BIO-16      Focused Daytime Bat Roosting Habitat Assessment.** Prior to any tree trimming or removal, a qualified bat biologist will conduct a focused daytime bat roosting habitat assessment to identify suitable bat roosting habitat within the trees.



- BIO-17 Focused Nighttime Acoustic and Emergence Survey.** If suitable bat roosting habitat for crevice/cavity maternity roosting bats is identified during the daytime bat roosting habitat assessment, a qualified bat biologist will conduct a maternity season focused nighttime acoustic and emergence survey at the locations where suitable bat roosting habitat for crevice/cavity maternity roosting bats has been identified. The survey(s) will occur from 30 minutes prior to sunset to 1 hour after sunset. Upon completion of the survey, if impacts to occupied habitat will occur, additional avoidance and minimization measures will be developed and implemented in the project. These measures shall consult *Caltrans Bat Mitigation: A Guide to Developing Feasible and Effective Solutions*.
- BIO-18 Preconstruction Bat Surveys.** A qualified bat biologist will conduct a preconstruction nighttime emergence survey within 3 days prior to the trimming of the tree. If the preconstruction survey and trimming occurs during the bat maternity season, and bats are observed emerging from the tree, then trimming will be postponed until either a nighttime survey confirms the absence of roosting bats or until the end of the maternity season. If the preconstruction survey and trimming occurs outside of the bat maternity season, and bats are observed emerging from the tree, the two-step tree removal process will be employed.
- BIO-19 Two-Step Tree Trimming/Removal.** Trees that have been identified as confirmed roost sites require a two-step removal process and the involvement of a qualified bat biologist to ensure that no roosting bats are killed during this activity. This two-step removal will take place over two consecutive days as follows: on Day 1, branches and limbs not containing cavities, as identified by a qualified bat biologist, will be removed using hand tools or chainsaws. The goal of this step is to create sufficient disturbance to cause any bats roosting in the tree to leave that night and not return, but not at a level of intensity that will cause bats to fly out of the tree during the disturbance itself (i.e., during the daytime, when leaving the roost could result in predation). On Day 2, the remainder of the limbs/tree may be removed and any crevices or cavities will be inspected for the presence of bats by the bat biologist before disposal.
- BIO-20 Night Work Lighting.** If night work (i.e. between dusk and dawn) is anticipated within 100 feet of where bat roosting is confirmed, night lighting shall be used only in areas of active work and shall be focused on the direct area(s) of work and away from the roosting areas to the greatest extent practicable.